The Mining Journal

RAILWAY AND COMMERCIAL GAZETTE.

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 776.---Vol. XX.] LONDON, SATURDAY, JULY 6, 1850. [Price 6d.

AT CRAIGIOC LEAD MINE, LLANARMON, NEAR MOLD, FLINTSHIRE.

MR. HILL will SELL, BY AUCTION, on Friday, July 12, 1850, all the BUILDINGS, PUMPING ENGINE, BOILERS, MATERIALS of SEATING and FIRE GRATES, 100 yards of strong 12-inch PUMPS, made of good cold-blast iron; cistern and rods, 35 yards of pumps and clackpieces, for a 12-inch pump.

CASTINGS, WROUGHT-IRON WORK, BOILER-PLATES, smiths' tools, gins, capstans, ropes, pulleys, and other materials.

For catalogues apply to the auctioneer, at Oswestry.—Mr. William Challiner, of Llanarmon, will show the lots.

IMPORTANT IRON, COPPER, AND TIN-PLATE WORKS.

MESSRS. SHUTTLEWORTH and SONS have been favoured with instructions from Trustees under a Mortgagee Deed to SELL, BY AUCTION, at the Auction Mart, in London, on Friday, the 26th of July, at Twelve o'clock, the valuable and important ESTABLISHMENTS of the GOVERNOR AND COMPANY OF COPPER MINERS IN ENGLAND, in CWM AVON, in the county of GLAMORGAN.

The establishment at Cwm Avon is of the most complete and finished character, and includes every power and erection essential for carrying on, in the most economical manner, and on a large scale, every branch of the Iron, Tin-plate, and Copper Trades. The leases under which the property is held include several thousand acres of land, abounding in rich seams of superior bituminous coal, including all the veins of argillaceous iron ore of the lower measures, which supply the large iron-works of South Wales; and, in addition, the black-band iron ore, which is wrought at a very low price per ton. The collieries in the levels and pits now working afford almost an unlimited supply of cheap mineral, within an average of 3 miles of the shipping port.

The establishment, which was erected at a cost of nearly half a million sterling, consists of the following separate works:—

IRON TRADE.—Seven blast-furnaces complete, capable of producing from 850 to 900 tons of pig-iron per week, with coke ovens and refiners attached; 3 puddling and 5 rail and bar mills of the best construction, which are capable of producing 3000 tons of finished bar or rail per month.

The TIN-PLATE FORGES and MILLS are capable of working up iron for finishing 1000 boxes of tin-plates per week, with chemical works attached, for the purpose of abstracting during the conversion of wood into the necessary supply of charcoal, for this branch of trade, the naptha, acetic acid, and other products, and also for the supply of sulphuric and muriatic acids.

The COPPER SMELTING-WORKS, which are under one roof, are capable of smelting about 600 tons of ore, equal to 50 tons of refined copper per week, and possess unusual convenience for the supply of water and the cheap deposit of slag. The copper rolling-mill is one of the largest in Wales, with hammers, rolls, &c., attached.

The FIRE-BRICK MILL can turn out 100,000 bricks per week.

In the centre of the works is a large enclosed depôt for stowage of all goods, and also a line of workshops complete in every respect, with the necessary steam-engine, machinery, and tools, for the supply of all kinds of pattern-makers, joiners, sawyers, fitters, boilermakers, smiths, and founders' work required for a large establishment. The offices for conducting the business in the centre of the works are most complete. There is an excellent manager's house a short distance from the works, whilst detached in convenient localities are about 1000 neat four-roomed cottages, with sufficient houses of a better class for the respective agents and workmen, shops, and a large square, fitted for the purpose of a market, and excellent stabling for upwards of 300 horses. The advowson of the parish of Michaelstone is in the gift of the vendors, and meeting-houses, reading-rooms, libraries, and schools, have been established for the use of the workmen. The erections, works, and buildings, with the exception of two of the blast-furnaces, are in the parish of Michaelstone, held by the company for an unexpired term of 90 years, and the control of the population connected with the works is thus beneficially under the managing director of the works. The whole of the works are connected by rail or tramroads with the collieries and the shipping port, which is distant only 2¼ miles, and the South Wales Railway passes close to the premises.

The premises may be viewed by application to John Biddulph, Esq., Coed-park House, adjoining the works; and particulars obtained in due time at the general office of the establishment, in Cwm Avon; of Messrs. J. C. and H. Freshfield, solicitors, New Bank-buildings; of Messrs. Tilson, Squance, Clarke, and Morrice, solicitors, Coleman-street; at the Auction Mart; and of Messrs. Shuttleworth and Sons, 29, Poultry.

THE FOREST COPPER WORKS AND GRAIGOLA COLLIERY, near SWANSEA, GLAMORGANSHIRE.

MESSRS. SHUTTLEWORTH and SONS have received instructions from the Trustees, under a Mortgage Deed, to SELL, BY AUCTION, at the Mart, on Friday, the 26th of July, at Twelve o'clock, a portion of the important ESTABLISHMENTS of the GOVERNOR AND COMPANY OF COPPER MINERS IN ENGLAND, comprising the FOREST COPPER WORKS, with all the necessary ERECTIONS, BUILDINGS, MACHINERY, APPARATUS, TOOLS, IMPLEMENTS, and APPENDAGES adequate to the smelting of 350 tons of ore, or 45 tons of copper per week—the works being in every respect complete, and the furnace bottoms remaining untouched, the premises occupying about 60 acres of land, advantageously situate between the Swansea Canal and the navigable River Tawe, about 3 miles from Swansea, in the county of Glamorgan.

Also, the GRAIGOLA COLLIERY, situate about 7 miles from the port of Swansea, worked by level, and one of the descriptions of steam-packet coal admitted for tender in the Government contracts.

The premises may be viewed by application to Mr. Edmonds, at the works, of whom particulars may be obtained in due time; also at the general office of the Company, at Cwm Avon; of Messrs. J. C. & H. Freshfield, solicitors, New Bank-buildings; of Messrs. Tilson, Squance, Clarke, and Morrice, solicitors, Coleman-street; at the Mart; and of Messrs. Shuttleworth and Sons, 28, Poultry.

TO CONTRACTORS, BUILDERS, AND OTHERS.

TO BE SOLD, BY PRIVATE CONTRACT, the ENGINES, MACHINERY, &c., which have been used in the erection of the Britannia-bridge, consisting of ONE 40-horse HIGH-PRESSURE ENGINE, with 18-inch cylinder, and 3-feet 6-inch stroke, with boiler complete, drum and hoisting gear; ONE 25-horse HIGH-PRESSURE-ENGINE, with 14-inch cylinder, and 2-ft. stroke, with portable boiler complete, drum and hoisting gear; travelling cranes, landing cranes, setting machines, single and double purchase crabs, blocks, chain and tackle of every description, and of first-rate quality.—Application to be made to Messrs. B. J. Nowell and Co., at the works, Britannia-bridge, Bangor, North Wales.

HYDRAULIC ENGINE.—FOR SALE, BY PRIVATE CONTRACT, at Crossgill Copper and Sulphur Mines, near GARRIGILL GATE, ALSTON MOOR, a valuable PRESSURE ENGINE, used for pumping water out of the Crossgill Mines, which has been little used, made by Messrs. Hawthorn, of Newcastle, consisting of horizontal cylinder, 9-inch diameter, 9-feet stroke; 4 double Cornish valves, 4½-inch diameter, and hand gear of the most improved construction; about 40 fathoms of pressure pipe, all in good condition, and well calculated for mining, colliery, or other purposes.—Also,

1 Whim for drawing work, with 2 pulley wheels and frames.
1 Crane and rope, 1 three-sheave block, and 1 snatch block.
3 Whim tubs, 1 barrow, and 6 ladders; smiths' tools, spear plates, and screw bolts.
Timber and planking, rack and manger, 2 bedsteads, cupboard, and tool chest.

Mr. Cuthbert Peart, of Alston, will give further information; and Mr. Douglas, of Westgate-street, Newcastle; or Mr. John Dolphin, Hunter House, Derwent, will treat with applicants for sale.

There are also 30 fathoms of metal pumps in two stands, with working barrels, 6 in. in diameter, 4 feet stroke, with buckets, clacks, and spears, which may be taken with the engine.—June 27, 1850.

FOR SALE, BY PRIVATE CONTRACT, at the Charlestown United Mines, near ST. AUSTELL, the following MINING MATERIALS—viz.:

1 70-inch cylinder DIRECT ACTING PUMPING ENGINE, 10-feet stroke, with two boilers, about 22 tons, and cast-iron balance-bob.
1 STEAM-ENGINE DRAWING MACHINE, 26-inch cylinder (8-feet stroke in the cylinder), gear, cage, &c., complete, with 1 boiler, about 10 tons.
1 WATER WHEEL, 28 feet diameter, and 7 feet breast, with cast-iron axle, cranks, &c., complete; 1 ditto 10½ feet diameter by 4 feet breast.

Also PITWORK—namely: 1 plunger lift, 36 fathoms 17-inch pumps, complete, 1 ditto, 9 fathoms 10 and 11-inch pumps, complete, 1 drawing lift, 19½ fathoms 11-inch pumps, complete, 1 ditto, 4½ fathoms 5-inch pumps, complete, 13 9-feet 10-inch, 1 3-feet 10-inch, 40 9-feet 11-inch, 1 6-feet 11-inch, 1 3½-feet 11-inch, 10 9-feet 12-inch, 1 6-feet 12-inch, 20 9-feet 13-inch, 1 7-feet 13-inch, 1 6½-feet 13-inch, 1 9-feet 17-inch, 1 6-feet 17-inch pumps; 1 9-feet 7-inch, 1 9-feet 8-inch, 2 9-feet 8½-inch, 1 9-feet 9-inch, 1 10 ft. 10 in., 1 10-feet 10½-inch, 10-feet 11-inch, 1 9-feet 13-inch, 1 9-feet 14-inch working pieces, 1 6-inch by 2½-feet, 2 9-inch by 6-feet, 1 10-inch by 4½-feet, 1 10-inch by 2½-feet, 1 12-inch by 3-feet, 1 12-inch by 2½-feet, 1 13-inch by 5-feet, 1 14-inch by 3-feet, 1 16-inch by 3½-feet doorpieces, 1 9-feet 8-inch, 1 6-feet 8-inch, 1 6-feet 9-inch, 1 4-feet 10-inch, 1 4½-feet 11-inch, 1 4-feet 11-inch, 1 6-feet 13-inch, 1 9-feet 13-inch, 1 6-feet 14-inch, 1 5½-feet 14-inch windbores, 1 8-feet 7-inch, 1 12-feet 10-inch, 1 9½-feet 10-inch, 1 9-ft. 11-inch, 2 10-feet 11-inch, 1 10-feet 12-inch, 1 9-feet 14-inch plunger poles, 1 9-inch, 1 10-inch, 2 11-inch, 1 14-inch stuffing boxes and glands, with sundry matching pieces of various lengths and sizes, 13 fathoms shaft rods, American Oak, 27 fathoms ditto red pine, with plates and bolts, 32 fathoms ditto, 6 inches square, with plates and bolts, 25 fathoms pump rods, 1¼-inch round and square iron, 24 fathoms ditto 1¼-inch round iron, 2 capstans and shears, 90 fathoms 10-inch capstan rope, 188 fathoms 13-inch cable-laid new capstan rope, 5 horse whims, with shaft, tackle and pulleys, complete, several horse whim ropes and kibbles, 2 wood stamp axles, with tappets, to carry 12 heads each, and frames for the same, cast-iron and wood rolls, capstan, whim, and other pulleys, bob-gudgeons and nosepiates, plummer and tep blocks, large and small saddles, bearing, bucket and clackseat brasses, new iron, various sizes, bittered and cast-steel, spike, 2 in. board, hatch and half hatch nails, white and red lead, several large and small beams and scales and carpenters' benches, rodplates, staples and glands, flanch bolts and rod pins, chain, a boring machine, punching engine, large and small lathe, a large quantity of rail iron, saddles and sleepers, several railroad waggons, balance and shaft bobs, smiths' and miners' tools, several smiths' bellows and anvils, with a large quantity of timber, plank, bricks, &c., and a variety of articles useful for mining and other purposes.

For further particulars, and to treat for the above, apply to Captain Barratt, at the Charlestown Mines.

MR. JAMES CROFTS, of No. 4, KING-STREET, CHEAPSIDE, takes the liberty of soliciting the attention of CAPITALISTS to the MINING INTERESTS of GREAT BRITAIN, as offering, at this time, the SAFEST MEDIUM OF INVESTMENT of any adventures of an acknowledged speculative character, and TENDERS his SERVICES generally for the PURCHASE and SALE of MINING SHARES.

Mr. CROFTS has at present FOR SALE SHARES in most of the MINES of repute, comprising the Tavistock District, and also in Roche Rock, West Providence, Wellington, Wheal Crebor, Wheal Langford, Eagair Lice, Cwm Erfin, Bodcal, Llwynmaleos, Wheal Trescol, and Tokenbury; and is a BUYER in Lamberooe Wheal Maria.

Mr. C. solicits attention in particular to the shares in WHEAL VINCENT, WHEAL SARAH and WHEAL BENNY, as being particularly eligible investments at this moment.

☞ Mr. CROFTS is NOT A DEALER in SHARES for his own account, but acts exclusively for principals, and solicits communications from the country.—Dated June 28, 1850.

CARMARTHENSHIRE.

FREEHOLD ESTATES, containing incalculable quantities of COAL and IRON MINES.

TO BE SOLD, BY PRIVATE CONTRACT, the following several FREEHOLD MESSUAGES, TENEMENTS, LANDS, and HEREDITAMENTS, together or in lots—viz., in the parish of LLANELLY:—

LOT I.—All those several MESSUAGES, TENEMENTS, and LANDS, called KILFERY-RECHOF and NEW INN, with the APPURTENANCES, containing by admeasurement 103 acres, or thereabouts, be the same more or less.

LOT II.—All that other MESSUAGE, TENEMENT, and LANDS, called FOY-VACH, and the WATER CORN GRIST MILL, called FOY MILL, containing by admeasurement 30 acres, or thereabouts, be the same more or less.

In the parish of LLANGENDEIRNE.

LOT III.—All that MESSUAGE, TENEMENT, and LANDS, with the APPURTENANCES, called TIRUCHOF (otherwise ROSEFACH), containing by admeasurement 16 acres, or thereabouts, be the same more or less.

The above property is within a short distance of the Kidwelly Canal, and distant from Pembrey Floating Harbour 8 miles, where the present demand for coals far exceeds the supply, and near to the South Wales Railway.

Further particulars can be obtained on application to Dr. Laurence, Carmarthen; or to Mr. John Griffiths, Aberguilly, near Carmarthen.

Carmarthen, June 17, 1850.

SOUTH WALES.

TO BE SOLD, BY PRIVATE CONTRACT, a FREEHOLD ESTATE, in the line of the South Wales Railway, with IRON-WORKS, COLLIERIES, and BRICKYARD, consisting of upwards of SEVEN HUNDRED ACRES of FREEHOLD LAND, in a good state of cultivation; TWO BLAST-FURNACES, with casting-house, hot-air stoves, and all other appliances for the Manufacture of Pig-iron and Castings.

A NEW BLAST-ENGINE (by the first makers), of great power, and capable of working an additional number of furnaces, with an ample supply of COAL and IRONSTONE on the ESTATE, worked at a cheap rate, and additional mineral rights adjoining, together with STEAM-ENGINES and WATER POWER for working the Mines and Brickyard, and most convenient railroads and surface roads.

The Iron-works have been recently in operation, and could be resumed at once. The Colliery business is considerable, there being a good market for the coals, and the collieries near an excellent harbour, with communication by canal. There is also an ample supply of FIRE-CLAY upon the estate, with kiln, drying stove, clay rolls, and every requisite for Manufacturing Fire-bricks at a remunerating price.

There is an excellent residence on the estate, delightfully situated, besides manager's house and counting-house, and numerous cottages—the whole in good repair.

For particulars apply to Mr. R. W. Jones, C.E., Loughor, near Swansea.—June 10.

OLD HAIGH MOOR COLLIERY.—TO LET, and to be entered on immediately, all that old established and well-known COLLIERY, situate at LOW LAITHS, in the townships of Alverthorpe and Osset, in the West Riding of the county of York, called the OLD HAIGH MOOR COLLIERY, lately worked by Mr. Joshua Smithson, and is now working by his trustees.

There are about 100 acres of the Haigh Moor Bed to get, the average thickness of which is about 3 feet 4 inches, and more than the above quantity of the Gawthorpe Bed of Coal, the average thickness of which is about 3 feet 8 inches.

There is also a Lower Bed of Coal, to which the proprietor is now sinking, of several hundred acres in extent, and which is expected to prove of superior quality.

The colliery is extremely well situated, both for land and water sales, being distant about ¼ mile from the town of Wakefield, and having depôts for the supply of that place and the neighbouring towns at Alverthorpe and Westgate Common. There is a tramway or railway from the colliery to the River Calder, and the Lancashire and Yorkshire Railway, at Wakefield, which affords facilities for land sales on the places lying on the line of the Wakefield, Pontefract, and Goole Railway, and adjacent thereto, and the shipment of coals at the River Calder, at Wakefield, and also at Goole.

For further particulars apply to Mr. Andrew, land and mineral agent, Kirkham Cottage, near Wakefield; Mr. Whitehead, Bank, Wakefield; or to Mr. George Hayward, Headingley, Leeds.—Headingley, July 2, 1850.

VALUABLE COPPER AND LEAD MINE TO BE LET ON LEASE, for 31 years.—This property has been procured at considerable expense from the Commissioners, on the Mountain of Mallane, in the parishes of Celycwm and Caye, in the county of Carmarthen. The copper lode is about 3 feet wide, composed of gossan and spar, and from 5 to 8 inches of copper lying on the side. The hill is above 19,000 acres, consisting of several lodes of copper, which have never been worked, but are considered worthy of a trial.

For further particulars apply to Isaac Davies, Melmyrhas, near Llandovery, Carmarthenshire.—The proprietor proposes keeping a few shares for himself.

EAST OF SCOTLAND MALLEABLE IRON COMPANY.—The Directors have been authorised to RECEIVE OFFERS for the PURCHASE, or LEASE, of the MALLEABLE IRON WORKS at DUNFERMLINE—comprising a STEAM-ENGINE, of 80-horse power, working the machinery, consisting of FORGE and 2 PUDDLE BAR TRAINS, of 16 inches diameter, HAMMER and PATENT SHINGLING MACHINE; also a 16-inch MERCHANT BAR or RAIL MILL, a 12-inch MILL, for ordinary sized merchant bars, and an 8-inch GUIDE MILL, 13 PUDDLING FURNACES, and 6 MILL FURNACES—the whole capable of producing 120 tons of bar-iron weekly.

A REFINERY STEAM-ENGINE, of 45-horse power, with blowing apparatus, complete, and two fires erected.

A complete SET of WORKSHOPS, containing a 20-horse power STEAM-ENGINE, driving a powerful roll-turning lathe, and blowing apparatus for smiths' fires.

A PUMPING and CLAY MILL STEAM-ENGINE, of 16-horse power, used for the manufacture of fire-brick, and pumping water for supply of engines.

Also, in course of erection, a STEAM-ENGINE, of 80-horse power, intended to drive the mills apart from the forges, having strong cast-iron framing laid down, and machinery suitable on the premises, which could be brought into active operation in a short period.

Together with the necessary TOOLS, LOOSE MACHINERY and STOCKS, of different kinds.

Offers will also be received for the PURCHASE of the ESTATE of TRANSY, consisting of about 107 imperial acres, with elegant MANSION-HOUSE and PLEASURE GROUNDS, situated about half a mile to the east of the town of Dunfermline.

Applications may be made to Mr. James Inglis, Chairman of the Company; or to Johnstone, Russell, and Craig, writers, Dunfermline.—Dunfermline, March 15, 1850.

TO RAILWAY DIRECTORS AND ENGINEERS.—Mr. THOMAS DUNN, of WINDSOR BRIDGE IRON-WORKS, near MANCHESTER, begs to give Notice, that he is now prepared to SUPPLY, to any extent, his PATENT IMPROVED WROUGHT-IRON and SPRING STEEL TRAVERSERS, for REMOVING CARRIAGES, &c., from one line of RAIL to another.

One of these Traversers can be put down in a few hours, without altering the permanent way, or stopping or impeding the general traffic. The cost of these Traversers, with wear and tear, is seldom one-third of that of the old system.

N.B.—There having been several attempts to infringe and evade this patent, by untrademenlike people, the Patentee hopes to have the support of railway proprietors generally, as he has expended much time and money in economising and perfecting this portion of railway rolling stock.

TO BE SOLD CHEAP, TWO SECOND-HAND LOCOMOTIVE ENGINES, 6 wheels, coupled, as good as new, for contracting purposes.—For price and further particulars apply at the works.

STIRLING'S PATENTS FOR IMPROVEMENTS IN IRON.—1. TOUGHENED CAST-IRON, which is double the strength of ordinary cast-iron, and only from 10s. to 12s. per ton extra.

2. ANTI-LAMINATING RAILS and TIRES for WHEELS at an extra price of about 7s. 6d. per ton. Also IMPROVEMENTS in the MAKING of WROUGHT-IRON—saving one process to the manufacturer.

Further particulars and terms of license, &c., may be obtained on application to Mr. Jee, civil engineer, No. 6, John-street, Adelphi, London; also from the London agents, Messrs. Gardner and MacAndrew, 27, Queen-street, Cheapside; and the Scotch agents, Messrs. W. and J. H. Johnson, 166, Buchanan-street, Glasgow; and 20, St. Andrew's-square, Edinburgh.

MINING ALMANACK for 1850.—The SECOND VOLUME of this publication will appear early in July, with Original Articles and Statistical Matter up to the latest period.

London: Published at the Office of the *Mining Journal*, 26, Fleet-street.

TO MILLERS AND OTHERS.—FOR SALE, a new double cylinder HIGH and LOW PRESSURE CONDENSING BEAM ENGINE, of 25 horses power, with or without boilers. The consumption of coals guaranteed not to exceed 3½ lbs. per horse-power per hour. Also one of 16 horses power.

For further particulars apply (post-paid) to William Joyce and Co., engineers, iron-founders, &c., Greenwich Iron-Works, near London.

STEAM-ENGINES FOR SALE.—TO BE SOLD, BY PRIVATE CONTRACT, a 32-inch cylinder STAMPING ENGINE, single acting, 9 feet stroke in cylinder, with steam case, boiler, about 11 tons, and axles and frames for 72 heads.—Also, a 30-inch PUMPING ENGINE, 8 feet stroke in cylinder and 7 feet in shaft, with boiler, about 6 tons.—Applications to be made to Hocking and Loam, engineers, Redruth.—Dated June 26, 1850.

TO CAPITALISTS.—WANTED, a PARTNER, in an established COLLIERY, who can command £2000 or £3000—active or otherwise. The colliery is situated in Monmouthshire, and is in connection with the port of Newport by the Canal Company's New Western Valleys Line. The colliery is in full work. Satisfactory reasons will be given why a partner is admitted. The whole of the money brought in will be applied to the enlargement and working of the colliery. None but principals will be treated with, and to them every information will be afforded.—Address "A. D.," care of the Editor of the *Mining Journal*, 26, Fleet-street, London.

SLATE AND FLAG QUARRIES IN NORTH WALES.—The proprietors of a SLATE and SLAB QUARRY, situated within six miles of a sea-port town, to which a railway is laid, are desirous of DISPOSING of ONE-THIRD of their interest therein to any gentleman disposed to join them. The quarries have been recently opened, and are considered to be one of the finest veins of slate ever discovered on the Bangor vein.—For particulars apply to "A. H.," 1, Palace-place, Whitehall, London. References will be required.

SLAB QUARRY IN NORTH WALES—TO BE SOLD, situated within three miles of a wharf near the sea. The quarry is open, and from which any quantity of flags can immediately be raised; they are of a beautiful light blue colour, and free from spots or blemish. The vein is so peculiarly jointed, that no machinery is required for either planing or sawing.—For particulars apply to "A. H.," 1, Palace-place, Whitehall, London. References will be required.

MR. EVAN HOPKINS, C.E., F.G.S., CONSULTING MINING ENGINEER,
OFFICE, No. 13, AUSTINFRIARS, LONDON.

Mr. HOPKINS may be consulted daily by Noblemen, Gentlemen, and Capitalists, who have invested, or may wish to invest, their capital in MINES or MINERAL PROPERTIES, on all matters connected therewith (Home and Foreign).

*** Every description of Mineral Property inspected and reported on, and distant capitalists may receive periodical advice, in the German, French, and Spanish Languages.

N.B.—Managers and Directors of Mines, as well as Mining Captains, will find Mr. Hopkins's offices convenient for reference on all matters connected with mining, as he has all the Maps on the Geology and Mines of the United Kingdom, the majority of which are from his own observations. The emigrants to California and other gold districts are also furnished with instructions on good mines, deposits, and machinery for the same.

MINING PROPERTY.—Mr. HERRON has SHARES in the best DIVIDEND MINES FOR SALE, and which will give to the purchaser 17 to 25 per cent. for the outlay; amongst others are the following:—South Basset, South Frances, Treviaky, Wheal Seton, Trethellan, Wheal Comfort, Treswean, Stray Park, Levant, Botallack, South Tolgus, Devon Great Consols, Tincroft, Tamar, Callington, Holmbush, Lewis, Keswick, and West Providence—United Mexican, Asturian, St. John del Rey, and Linares Mines.

MINING OFFICES—33, *CLEMENT'S-LANE, LOMBARD-STREET.*

MINING INVESTMENT.—Messrs. BOXALL & CO. have SHARES FOR SALE in several DIVIDEND MINES, giving from 15 to 25 per cent. on present purchase; also Shares for sale where no further calls will be required, and DIVIDENDS paid within three months. The attention of CAPITALISTS is INVITED to the LAST NAMED, as being safe investments, these mines having proved very rich, are now making good returns, and the shares can be bought at a moderate price.—Information regarding new mines brought before the public, with the market prices of shares, furnished gratuitously.

MINING OFFICES,—5, *CROSBY-HALL CHAMBERS, BISHOPSGATE-ST., CITY.*

MESSRS. WATSON & ENSOR, MINING AGENTS,
4, *TOKENHOUSE-YARD, LOTHBURY, LONDON.*

MR. T. A. READWIN, MINING OFFICES,
2, *WINCHESTER-BUILDINGS, OLD BROAD-STREET, LONDON.*

MR. GEORGE BATE, Jun., CIVIL ENGINEER AND SURVEYOR, *WOLVERHAMPTON.*
Offices in Queen-street, corner of Piper's-row.
N.B.—UNDERGROUND MINING SURVEYS accurately executed.

JAMES LANE, MINING SHARE DEALER,
80, *OLD BROAD-STREET, LONDON.*

BRITISH AND FOREIGN REGISTRY OFFICE.—PARTIES having MINERAL ESTATES, COLLIERIES, or MINES, FOR SALE, or SHARES TO DISPOSE OF, in DIVIDEND MINES, or OTHERS, by enclosing a list of the number and price of such shares, and particulars of such property, the same will be REGISTERED FOR SALE, and commission charged only on sales taking place. Money advanced if required.—Apply to Messrs. DURRANT & Co., 58, Lombard-street.

LONDON AND LIVERPOOL COMMISSION AND GENERAL AGENCY OFFICES.—Every description of COMMERCIAL BUSINESS CONDUCTED by Messrs. BRADFIELD & CO., No. 19, STRAND, LONDON, and Mr. BIRD, ST. GEORGE'S-BUILDINGS, BASNETT-STREET, LIVERPOOL.

Patentees, Inventors, and others desirous of giving publicity to New Works, will have their views vigorously worked out by parties acquainted with every detail and channel, metropolitan and provincial.—Agencies arranged, and correspondence, inquiries, collection of debts and rents, undertaken with energy and economy.

CONSOLIDATED COPPER MINES OF COBRE ASSOCIATION.—Notice is hereby given, that the HALF-YEARLY GENERAL MEETING of proprietors of this Association will be HELD at the office of the Company, No. 26, Austinfriars, on Thursday, the 18th day of July next, at One o'clock precisely.

By order of the Court of Directors,
26, Austinfriars, June 29, 1850. WM. LECKIE, Secretary.

EAST OF SCOTLAND MALLEABLE IRON COMPANY.—Notice is hereby given, that a SPECIAL GENERAL MEETING of the shareholders of the EAST OF SCOTLAND MALLEABLE IRON COMPANY will be HELD within the Town House of Dunfermline upon Thursday, the 22d day of August next, 1850, at Twelve o'clock noon, for the purpose of considering a proposal to DISSOLVE the said COMPANY, and to SELL and realise the whole PROPERTY and ESTATE, and FUNDS and EFFECTS of the Company, and finally to wind-up the Company's affairs—all in terms of the 37th clause of the Contract of Copartnery of the said Company.

By order of the Directors, JAMES INGLIS, Chairman.
Dunfermline, Feb. 6, 1850. JOHN DRYSDALE, Interim Secretary.

GENERAL MINING ASSOCIATION.—Notice is hereby given, that an EXTRAORDINARY GENERAL MEETING of the proprietors in this Association will be HELD at this office on Thursday, the 18th day of July, at One o'clock precisely, for the purpose of confirming a resolution of the Extraordinary General Meeting of the proprietors, held on the 27th day of June last, for increasing the number of the Directors of the Company to seven, exclusive of the Director appointed by the Representatives of his late Royal Highness the Duke of York; and also, after such confirmation, for the purpose of electing an additional Director.

By order of the Board of Directors,
Office of the General Mining Association, J. B. FOORD, Secretary.
52, Old Broad-street, London, July 2, 1850.

ROYAL SANTIAGO MINING COMPANY.—The directors hereby give Notice, that the ANNUAL GENERAL MEETING of the shareholders will be HELD at the Office of the Company on Wednesday, the 10th of July next, at One o'clock precisely, when the Directors will make their report.
38, Broad-street-buildings, June 20, 1850.

UNITED MEXICAN MINING ASSOCIATION.—Notice is hereby given, that the HALF-YEARLY GENERAL MEETING of proprietors of this Association will be HELD at the office of the company, No. 5, Finsbury-circus, on Wednesday, the 31st of July proximo, at One o'clock precisely, when the election of two directors and one auditor will take place.

Directors going out by rotation—Robert Biddulph, Esq., and Thomas M. Fleeker, Esq., and who being eligible thereto, are candidates for re-election.

Candidate for the vacancy in the auditorship, caused by the election of Henry Bunster, Esq., as director—Charles Biggs, Esq., of 123, Bishopsgate-street.

The transfer books will be closed as usual on the evening of the 12th of July, and re-opened on the 1st of August. By order of the Court of Directors,
5, Finsbury-circus, London, June 27, 1850. JOHN MATHER, Secretary.

WICKLOW COPPER MINE COMPANY.—The stated HALF-YEARLY MEETING of the Company will be HELD at their office, 10, Leinster Chambers, 43, Dame-street, on Thursday, the 11th day of July, 1850, at the hour of Two o'clock P.M.—Dublin, July 2, 1850.

COMPANIES PROCEEDING UNDER THE WINDING-UP ACT.

MADRID AND VALENCIA RAILWAY.—Very considerable interest was manifested on Monday in connection with the affairs of this undertaking, in which several thousand persons are interested, on the occasion of the hearing of a charge brought on by Mr. Quilter, the official manager, at the direction of Master Blunt, against the directors of this company, calling upon them to account for the funds entrusted to them by the shareholders. The charge of the official manager was addressed to—

William Chadwick, Esq., 29, Montague-square, and of Sydenham, Kent; and to Mr. James Anderson Rose, 11, Salisbury-street, Strand, his solicitor.
Gideon Colquhoun, Esq., of Walmer-lodge, Avenue-road, Regent's Park.
John Charretie, Esq., of Park-village-east, Regent's Park.
John Capper, 1, Adelaide-place, London-bridge, merchant; and to Messrs. Marten, Thomas, and Hollams, 31, Commercial Sale-rooms, Mincing-lane, his solicitors.
Count Eyrie, 7, Hinde-street, Manchester-square; and to Messrs. Bircham, Dalrymple, and Drake, 46, Parliament-street, his solicitors.
J. Knill, Esq., of Fresh-wharf, Thames-street, and his solicitors.
James Kinloch, Esq., 21, Gloucester-road, Hyde-park.
Nicholas M'Cann, Esq., 30, Parliament-street.
Joseph Montefiore, Esq., 2, Winchester-buildings, City.
Colonel Edward Stopford, late of 9, Manchester-square, now of 36, Lowndes-square.
The Hon. Charles Pelham Villiers, 27, Regent-street, Middlesex.
Solomon Jacob Waley, Esq., 32, Devonshire-place; and his solicitors, Messrs. Amory, Nelson, Travers, and Wynn, 25, Throgmorton-street.
William Lechmere Whitmore, Esq., 19, James-street, Buckingham-gate.

The following counsel and solicitors appeared:—Mr. Selwyn, for the official manager and his solicitors; Mr. G. Wale, for Mr. Waley; Mr. Bagallay, for Messrs. Capper and Knill; Mr. Bircham, for Count Eyre; Messrs. Lewis and Nash, for Mr. M'Cann and several others.

His Honour, the MASTER, proposed to take evidence in support of the charge, so as to make the directors liable; and accordingly Mr. Quilter, the official manager, after producing the ledgers and books of account, proceeded to prove the receipt of the moneys with which the directors stand charged, by calling in evidence one of the clerks of Messrs. Masterman, the company's bankers, who proved that between the 10th of October, and the 27th of December, 1845, a sum of 106,030*l.* was paid into the bank by way of deposit to the credit of the Madrid and Valencia Railway Company, and entered to the account of Messrs. Chadwick, Colquhoun, and Knill, as trustees. On the other side of the account payments were entered to the extent of 90,322*l.*, including caution-money and investments in stock—leaving a balance of 11,838*l.* in April, 1846. He also proved from the books that the caution-money paid into the Bank of England was 37,120*l.*, with 56,718*l.* invested in Exchequer-bills in October, 1845. He produced letters, one dated the 9th of October, 1845, opening an account with the Bank to the credit, and by the order of the three trustees; another dated the 21st of October, 1845, from Chadwick, Colquhoun, and Knill, and from Montefiore and Waley, giving directions to the bankers to honour all cheques signed by three of them and the secretary, Fowell; and another letter to honour cheques signed by two only and the secretary, Fowell. Subsequent letters to honour cheques, drawn by members of the provisional committee, were also produced, and put in, dated respectively March 16, 1846, October 4, 1848, and May 2, 1849.

Mr. FOWELL, the late secretary of the company, was then examined by Mr. Selwyn to prove the documents of the company. He identified the original prospectus, the letters of allotment, and the scrip approved of by the committee. He proved that at a board meeting it was resolved that 500 shares should be allotted to each of the committee of management, but that afterwards this amount being thought too large, was reduced to 250 each, which were allotted. He deposed to the adoption by the committee of the title of the letters of allotment which held their names forth as members of the committee; but it did not appear that Count Eyre attended any board meeting, although he was summoned, and called occasionally at the office for information. With the exception of Count Eyre, he proved that all the other members attended some meetings of the committee and signed scrip that was issued, besides discussing and approving of the form of the letter of allotment. With the exception of Mr. Whitmore, all the directors paid the 2*l.* deposit on their 250 shares. When he last saw the minute books of the company, a year and a half ago, they were in the possession of Mr. Chadwick, the chairman of the company.

Mr. KEDDEL, of the firm of Keddel, Baker, and Grant, of Lime-street, late solicitor to the company from its formation down to July, 1848, was next examined. Had attended every meeting of the directors, and prepared the draft of the letter of allotment, with the names of the directors on it, by the general authority of the board. There was a formal discussion, not as to its wording, but as to the beauty of the colouring, the ink, flourishing, and blanks. It was discussed at several meetings of the board. Did not recollect the names of those who were present; but his conviction was that at some or one all were present, excepting Count Eyre, who had 500 shares, he believed. All the money paid into the bank was paid on this form of allotment letter. The names of the directors were on the original draft when he drew it. Was appointed solicitor by resolution of the board. As regarded the manner in which the committee was appointed, it was in this way. About half-a-dozen preliminary meetings of gentlemen interested in getting up a railway in Spain took place between Austinfriars and Throgmorton-street. He declined to mention their names; but on going to the latter place he was asked if he would be solicitor, and a prospectus, all completed and printed, was ready to be issued, and the committee having been got together, the scheme was advertised to the world. The committee of management was not appointed until such a great number of applications for shares was received as to give them assurance to go on with the scheme. The company was never provisionally registered. Was consulted thereon, but, under his advice, no steps were taken for the purpose.

This being the case on the part of the official manager, a long and desultory discussion followed, the result being an adjournment of the further hearing, to give time to the parties charged to go over the evidence and prepare their reply. This section of the proceedings having terminated at one o'clock, his Honour, the Master, adjourned until two o'clock, at which hour a perfect torrent of allottees and attorneys entered the place of meeting, about 1400 shareholders having been summoned to show cause why, as original allottees of different numbers of shares, they should not be placed on the list of contributories. To facilitate the business and clear the court, the Master directed that all those who appeared to oppose their being placed on the list should enter their names in the appearance book, and their cases be adjourned for hearing to a future day; while all those, and there were some hundreds, who did not answer on their names being called out by Mr. Edwards, the chief clerk, were placed on the list as liable, without power to dispute the same, unless by special leave of the Court of Chancery. This proceeding occupied until four o'clock, at which hour the Master rose to attend the House of Lords.

Considerable surprise and dissatisfaction has been felt at the fact of Mr. Chadwick, the chairman of this company, having been allowed to remove himself out of the jurisdiction of the Court of Chancery, when, by the issue of a *ne exeat regno*, he might have been detained and called to account. Mr. Rose, his solicitor, still declines to give up the papers, unless an undertaking is given to pay his lien on them of 5000*l.*; and Vice-Chancellor Knight Bruce has decided that he is not bound to answer any questions, or disclose what documents he has, unless his lien is first paid, it being held that the Winding-up Act does not destroy a solicitor's lien for costs, and that he is not bound to deliver over papers while they remain unpaid. Should there be anything to return to the shareholders consequent on the winding-up of the affairs, a question will arise whether it should go to the original allottees or present holders of scrip. It is understood that, out of the 106,000*l.* received as deposit, 30,000*l.* went in caution money, 30,000*l.* in buying up shares, and 30,000*l.* to the late chairman. Some 20,000*l.* was expended for surveys, directors, and general purposes. At present, it is believed that there are no funds in hand, and unless the directors are made to refund the contribution necessary, the expense of winding-up will be considerable. There are 17,000 shares at present claimed and registered, out of 53,000 allotted; and 30,000 having been bought up, there are not above 7000 shares outstanding and not registered. It is believed that 10,000 shares are in the hands of purchasers, bought at 10*s.* and 20*s.* a share, and a question will arise whether the scrip was legally transferable.

DIRECT WEST-END AND CROYDON RAILWAY.—On Tuesday, in dealing with the cases of the provisional committeemen of this company, Master Tinney decided upon placing all on the list as liable, though they attended no meetings of the body, accepted no shares, but paid money on account of debts, and allowed their names to appear on the prospectus. There are about 106 of these gentlemen. Counsel for Mr. Kreeft contended that the only capacity in which he had acted was that of a referee for allotments of shares, and that consequently he could not have been a provisional committeeman. His Honour, the Master, held otherwise, on the production of a letter to the solicitor of the company, in Mr. Kreeft's own handwriting, and in which he said, "I have within the last week been applied to for payment of debts in respect of the Croydon and West-end Railway, of which I have the misfortune to be a provisional committeeman." Mr. James Lamb was similarly fixed.

GREAT WESTERN AND IPSWICH, AND SOUTHAMPTON RAILWAY.—The winding up of this Company's affairs was before Master Farrer, on Thursday, on the petitions of Mr. R. Hollingsworth, tobacco manufacturer of Birmingham, and Mr. J. Molloday, of Marble Hall, Warwick, who state that the undertaking was started with the view of connecting the principle railways on the western, southern, and eastern counties, so as to unite Yarmouth, Ipswich, Harwich, Colchester, Southampton, and Portsmouth, at a cost of 1,800,000*l.* There were 130 names on the provisional prospectus, with "power to add to their number." Mr. Hollingsworth states that he took 200 shares, and paid the deposit upon them. Mr. Prichard, the original projector, was appointed engineer, and completed plans and surveys for the line from Colchester to Hertford, but the panic, with its accompanying consternation, set in, and further proceedings were suspended. The directors afterwards subscribed to discharge the claims of creditors, but the subscriptions were insufficient. Actions were brought against the directors, and the present debts are estimated at about 3000*l.* Mr. Quilter is appointed official manager.

DIRECT BIRMINGHAM, READING, & OXFORD RAILWAY.—Master Brougham has given directions for summoning 1200 persons connected with this concern, to show cause why they should not be fixed on the list as contributories.

WATERFORD, WEXFORD, AND WICKLOW RAILWAY.—Sir William Verner has given notice of his intention to move for a committee to inquire into certain allegations contained in petitions presented on the affairs of this company, and which are alleged to affect the character of various members of the House of Commons.

ROYAL BANK OF AUSTRALIA.—On Tuesday, after three consecutive sittings, Master Richards decided in favour of the claim of Messrs. Prescott, Grote, and Prescott, the bankers, for 3063*l.* against this bank. It appeared, from a voluminous mass of correspondence put in evidence, that in 1840, Mr. James Hannen, now out of the country, had a large claim against parties in Sydney, for which he employed the bank to obtain payment. In 1842 he assigned the debt to Messrs. Prescott, in respect of advances due to them. Part of the money was paid, but in 1848 the directors pleaded inability to meet the remaining demand. Actions were afterwards brought against four shareholders in the company, but these actions have become stayed under the Winding-up Act. The official manager produced the books of the bank, in which the debt is treated as a debt due to Messrs. Prescott, in answer to which it was contended by Messrs. Farquhar and Johnston, solicitors for various shareholders, that Mr. Benjamin Boyd, who eventually received the money, was the agent of Prescott and Co., under power of attorney, and deed of ratification, and by which they sanctioned an arrangement by way of compromise in 1846, with that gentleman in Sydney. His Honour, on a review of the facts, decided it was clear that Boyd was the conduit-pipe or instrument through which the bank acted in Sydney; whatever Boyd did the bank did, and he was confirmed in this view by letters and entries in the bank books admitting the debt, and under all the circumstances he felt bound to admit the claim as proved.

WESLEYAN NEWSPAPER ASSOCIATION.—The Master proposes to make a second call of 4*l.* per share on the shareholders, to repay the debts.

KINGSLAND AND DALSTON LITERARY INSTITUTION.—Master Brougham has just settled the list of shareholders in this undertaking, which was started in 1846, by Robert Laing, of the Independent Gas Works, Haggerstone; S. E. Lee, of Dalston; T. Uzrelli, and others, with a capital of 3500*l.*, in shares of 10*l.*

SEA FIRE AND LIFE ASSURANCE COMPANY.—Master Tinney has appointed an official manager to wind up the affairs of this company, the promoters of which undertook to insure against the perils of the sea and fire. Its promoter, Augustus Collingridge (according to the petitioner for the winding up of the company, Mr. Joshua Richardson, C.E., of Neath) absconded and left England in April last. The concern was completely registered in 1849, and continued until May, 1850, after incurring various liabilities, which have to be ascertained. The capital was to be 100,000*l.*, in 100,000 shares of 1*l.* each; and the original directors were A. Collingridge, Sir William Ogilvie, Howel Gwyn, M.P., and Alexander Davis. A call of 20*s.* per share was made, but a large portion of the shareholders refused to pay it. Petitioner states, that actions have been brought and judgments recovered against him.

INDEPENDENT ASSURANCE COMPANY.—Debts of 645*l.* from the solicitor, and 199*l.* from other parties, have been proved before the Master, who has disallowed the claim of Mr. Cope, the secretary, for 1200*l.*, being of opinion that any sum called for under his order, to answer the liabilities of the company, would not be funds of the company within the meaning of the memorandum of 1849.

BASTENNE BITUMEN COMPANY.—Petitions have been presented for winding-up the affairs of this company, the promoters of which established it for the purpose of introducing into the metropolis and elsewhere a patent kind of pavement.

IRISH FISHERIES.—An important private meeting of Members of the House of Commons was held yesterday, in one of the committee rooms, Mr. HERBERT, Member for Kerry, in the chair, who was supported by the Lord Mayor of Dublin, Col. Dunne, and several other members connected with Ireland. The object of the meeting was to consider a proposal for cultivating the fisheries of Ireland. In addition to Members, several influential gentlemen connected with the wholesale fish trade were present. The plan proposed to be worked out has originated with Mr. John Whiteway, an English gentleman, who is intimately acquainted with the Irish fisheries, and the character of the natives embarked in that occupation. The plan may be briefly stated to be to employ welled smacks, of about 80 tons burthen, for the deep sea fisheries, to be attended by a steamer to bring the fish to shore, and to carry out bait and provisions to the crew, thus saving the necessity of the vessels leaving the fishing grounds till the time fixed for their return to port has arrived. Such a plan would enable one boat daily to be dispatched to Weston-super-Mare from Valentia, with all the superior fish for the London, Bristol, Bath, Cheltenham, and Birmingham markets, whilst that fish which finds the readiest sale in Ireland would be forwarded to all the inland towns by rail and cars. Fishing stations would be established along the coast for curing for home and foreign consumption, thereby giving employment to large numbers of the population. It proposes to supply the fishermen with gear and tackle, and purchase their catch at remunerative prices, so as to deliver them from the tender mercies of the middlemen, who prey upon their industry. An able statement of the plan, more in detail, was read by Mr. Ward, which gave rise to an animated discussion, and terminated in the plan being well received and highly complimented. The following resolution was passed:—"That the Members connected with Ireland, now assembled, approve of the objects which are proposed by the statement which has just been read to them; and although it is impossible at once to assent to the many and varied details contained in it, yet are of opinion that it contains much valuable information and statistic; and they are further of opinion that a company formed for the purposes of fishing on the west coast of Ireland, judiciously conducted, and provided *bonâ fide* with capital, would be remunerative."

CONDIE'S PATENT STEAM-HAMMER.—On Saturday last, there was dispatched from the Abercorn Iron Works, Paisley, a beautiful little hammer, the sixth, we believe, which has been finished under Mr. Condie's patent. This dainty little instrument, which was manufactured for Mr. Buckwell, of the Patent Compressed Coke Works at Cardiff, stands, including the die for compressing the coke, about 9 ft. 6 in. high. The hammer is 145 lbs. weight, with a stroke of 15 in. Mr. Condie's experience has enabled him to make many important improvements in the mechanism of his patent, but which, except to practical engineers, would be unintelligible unless illustrated by diagrams. On Friday we saw this little hammer in action, and then heard what induced us to believe that it will be a prominent feature in the Grand National Exposition of next year, when it will be brought immediately under the observation of the most eminent engineers and mechanics of the whole world. We feel assured that then it will not disgrace the scientific skill of Mr. Condie, its talented inventor. We have much pleasure in stating that a seventh hammer is in progress at Abercorn Works, and which, we understand, is to be forwarded immediately on being finished to an establishment in Austria.—*Glasgow Herald.*

HOLYHEAD HARBOUR.—The engineers are proceeding rapidly with the extension of the sea-walls at the northern breakwater. Upwards of 10,000 cubic feet of stone are on the ground for commencing the great sea-wall. Supplies of stone are daily being obtained from a neighbouring lofty eminence, that overhangs the harbour. The stone, when tipped over into the breakwater, forms in layers of from 12 to 50 feet thick. There are about 1300 men constantly on the works. The estimated cost of the harbour is 700,000*l.*, of which the Chester and Holyhead Railway Company have undertaken to subscribe 200,000*l.* The whole will enclose an area of upwards of 316 acres of sea-room.

PARTIAL DESTRUCTION OF A VIADUCT ON THE WHITEHAVEN AND FURNESS JUNCTION RAILWAY.—A large portion of a beautiful wooden bridge over the Esk, an estuary of the sea, on the Whitehaven and Furness Junction Railway, was destroyed by fire on Friday morning last. This bridge is a solid and well-executed construction, and is no less than 320 yards in length. About 60 yards have been destroyed or cut away, in order to prevent the fire from spreading. There is a belief that the bridge was wilfully set fire to, but our informant states that he was present at an investigation made on Saturday by three magistrates of the district, the Rev. J. Jenkins, John Peile, Esq., and Captain Scott, and that those gentlemen, after much investigation, did not find anything to confirm the supposition. The fire was first discovered by two workmen, and the alarm being given, a large body of men with buckets and ropes were set to work, but the flames gained so fast that it was thought right to cut away a portion of the bridge to save the rest. This was cleverly done, and a gap being made the fire was prevented from extending along the bridge. The flames were so intense that the rails became red hot, and the flames reached the upright supports of the bridge. The scene at this time was very magnificent. The fire reached to an immense height. Captain Scott has commenced an inquiry at the King's Arms, Ravenglass, from which it appears that there was no sign of the fire at 11 o'clock on Thursday night. When first observed, it was raging to windward, and the eastern side being most injured, seems to show that the fire commenced on the windward side. Very active exertions are being made to repair the damage, and it is hoped that the trains will be able to pass over the bridge in about a week or ten days.

LITERARY NOTICES.

Railway and Commercial Information. By SAMUEL SALT, Fellow of the Statistical Society of London, &c. London: W. H. Smith and Son, Strand; Longman and Co., Paternoster-row; and Adams, Fleet-street.

We have on former occasions called attention to two prior publications by the author of the volume under notice—*Statistics and Calculations*, and *Facts and Figures*, which were well received by the public; and the present compilation will be found in no way behind its predecessors in that selection and pithiness of extract which renders every morsel of information contained in its pages of interest and value. Mr. Salt, as manager of the goods department on the north-east division of the London and North-Western Railway, is placed in a situation of peculiar facility for collecting statistical details of railway progress, and other information of importance to commercial men and capitalists generally; and the volume under notice will be found of great utility for reference to its tabular and other matter, both in the counting-house and library.

FOREIGN INTELLIGENCE.

WEST INDIES.—The *Trent* arrived at Southampton on Tuesday, having on freight silver and gold from the Pacific ports, received *viâ* Panama, value $754,517; gold from California, value $228,266; specie from Carthagena, value $132,611; from Santa Martha, $80,614; from Jamaica, $7801; and from other parts of the West Indies, $21,241; the total value being $1,219,550; or, say, 248,910*l.* sterling.

CALIFORNIA.—From the latest accounts from San Francisco, which are to the 1st May, we learn that business is fast recovering from the long suffering during the winter months. The demand for provisions was brisk, and trade was in full activity, having been greatly promoted by numerous small steamers plying on the various rivers, which had opened up facilities of communication between the miners and the city. The population at the diggings were highly busy, and it was officially estimated that $80,000,000 would be obtained during the current year. The principal portion of the gold is now obtained by amalgamation; and the quicksilver of the mines near San Jose is in the market in abundance. A tax of $20 per month had been imposed by the local Legislature on all foreigners gold digging in the country. Notwithstanding the abundant produce of the diggings, not much could be obtained in the city at remunerating prices; this is accounted for from the fact, that payments in all trading transactions are made in gold dust, forming a circulating medium, and the surplus is remitted by the miners to their homes, through establishments truly American, termed "Expresses." Van Couver's Island was in a languishing state for want of labour, the labourers and servants having generally left for California. Coal mining was being carried on to a small extent—about 1000 tons had been raised by the natives from the outcrop, who are said to be docile, willing, and obedient. One shaft was sunk to a depth of 30 fathoms, and eight European miners were working with good prospects. $2,000,000 of gold dust had left Francisco during 10 days, from the 1st of May.

THE NEW CALIFORNIA.—The statements from Trinidad concerning the new gold district of Upata are again interesting. Mr. Vincente Echagarcy Sucre, who had reached the island, exhibited a specimen of the gold dust of the Yuruary, weighing ¾ oz., which he picked up in the short space of half an hour. Some of the grains are stated to be as large as grains of wheat, and the gold dust is described as abounding in the Savannah, on the north-west of the Yuruary, about 12 leagues from the river, and to extend over a space of land 40 leagues square. The Savannah on the other side of the river had not been explored. From the quantity of water coming down from the mountains in the interior, all further operations will have to be suspended till October, when the water subsides sufficiently to allow the gold dust to be got at and sifted. A silver mine has also been discovered at Upata. Mr. Sucre states that about 10,000 *pesos* of gold dust have already been collected by Monastero and others, one of whom found a lump of gold of 5 ozs. weight, adhering to a piece of quatz The gold is said to be three carats finer than that of California. The *Port of Spain Gazette* of May 17, publishes a circular, which was printed at Ciudad Bolivar, in Angostura, is in Spanish, and had just reached Trinidad; it is headed *El Oro del Yururay*, and sets forth that one Senor Pedro Monasterio, an inhabitant of the province of Barquesimeto, had just arrived from Upata, bringing with him the intelligence that rich auriferous grounds existed in the vicinity of the Yururay rivers, and producing visible tokens of the authenticity of the fact in the shape of samples of the precious mineral to the amount of 150 ozs. These are stated to be composed of grains of various sizes, some of which are as large as lentils or grains of coffee, and some so large as to exceed half an oz. in weight. The standard of the ore is represented as being of the highest purity, being 24 carats. The circular is signed *Unos Vecinos* (several inhabitants)—not a very responsible authority, but the *Port of Spain Gazette*, which seems to make no doubt of the correctness of the announcement, considers this a very natural substitute for the editorial "we" in a province which publishes no newspaper, though it possesses a printing press and types. A postscript appended to this document makes the further announcement, that since the departure of Senor Monasterio another individual had collected 138 ozs. of gold in the district of Yururay. A letter is also published in the paper we have alluded to, from the agent of a respectable firm in Trinidad, confirming the insteresting intelligence. It is a curious fact that there is every reason to believe the newly-discovered gold region to be identical with the El Dorado of Sir Walter Raleigh, in which case, if there be any truth in the discovery, history will have to make an apology to the manes of that much maligned hero.

SOUTH AUSTRALIA.—Prices of shares at Adelaide on the 14th Feb.:—Burra Burra, 160*l.* cash, sellers; Princess Royal, 46*l.* credit, sellers; Mount Remarkable, 10*l.*; Port Lincoln, 5*l.* 5*s.*; Belvedere, 2*l.* 10*s.*; Strathalbyn, 5*l.* (5*l.* paid); Wheal Gawler, 10*l.*; Wheal Barton, 13*l.* 10*s.* (the affairs of this promising mine are kept very quiet; from all we can learn, about 40 tons of ore may be expected in the town next week; free buyers, 15*l.*, three months); Wheal Maria, 2*l.* (a sale of 50 shares was taken at 36*s.* 6*d.*); Wheal Margaret, 1*l.* 10*s.* (par); Mount Liverpool, 5*l.* (10*s.* paid); upwards of 130 shares have changed hands during the week, but a liberal discount is allowed for cash; Paringa, 30*s.*; Victoria, 9*s.*; North Kapunda, 26*s.*; Adelaide, 20*s.*; Royal, a sale of 80 shares was made at 5*s.* net cash (11*s.* paid); Rhine Consols, North Rhine, and Gold Company, shares not issued. Money much easier, and offering at 15 per cent. for long periods, solely because securities offering at higher rates are not considered eligible.

At the half-yearly meeting of Wheal Maria Mining Company, the balance-sheet showed the balance of cash in hand to be nearly 350*l.* There are 30 tons of ore at grass, averaging 25 per cent. yield.

A favourable report on the Wheal Margaret Mine had been received from Capt. Richard Paull, in which he expressed himself as well pleased with the dressing department, the jigging machine answering first-rate.

The surgeon of the Reedy Creek Mine had been greatly censured for neglect in not obeying a summons to an accident; the terms of his appointment requires his attendance within a distance of 10 miles, and the doctor endeavours to excuse his conduct under the plea that John's Creek (where he was required to attend) was nearly 12 miles from where he resided, and that a horse was not brought for conveyance.

WESTERN AUSTRALIA.—A ponderous specimen of silver-lead ore had been exhibited from the Geraldine Mine. It resembles closely the ore from Wheal Margaret, and promises well in other respects. Tangible proof is now afforded of the mineral wealth abounding in this new, or rather re-discovered, country.

Near the Geraldine Mine copper has been discovered, and some extent of good country. The silver-lead mine is about 60 miles from Champion Bay, and 200 miles from Perth. Coal and timber fuel being abundant in the neighbourhood of the mine, there are great facilities for smelting the ores upon the spot.

The Australian Agricultural Company are sinking a shaft into a seam of coa of much greater thickness and of a superior quality to that they are now working. The pit is about two miles from the company's wharf at Newcastle, and preparations have long been making for connecting the pit with the wharf by a railway. The necessary iron and other materials for this work have arrived in the colony by the *Artemisia*, from which they were lately landed at Newcastle, so that in a few months coals from the new pit will be sent to Sydney. A further reduction in the price of coal will then take place. In future the company's chief officer in the colony is to be called "general superintendent," and not "commissioner." Mr. J. E. Ebsworth is to be the superintendent.

SYDNEY.—Manufactured copper has not varied much, being constantly sold at 11*d.* to 1*s.* 1*d.* per lb. for nail, and 1*s.* and 1*s.* 2*d.* for sheathing. The ore is now being produced in considerable quantities from various mines that have been recently opened, part of which has been smelted, and is becoming an article of regular export to India, where it sells at 110*l.* to 150*l.* per ton.

COAL.—A letter dated Alexandria, June 18, says—"There is again a rumour afloat of coal having been found in the upper country, and Hekekyan Bey, an Armenian, educated in England, has been dispatched to the place by the Viceroy to ascertain the fact. The site talked of at present is on the eastern bank of the Nile, opposite to Edfou, about four miles from the river side."

From Labuan, we learn that the coal-mining operations were making very slow progress; it had occupied from January 7 to April 10, to furnish 270 tons of coal for the use of the *Semiramis*. A great many Chinese and others were about to leave the colony in quest of more acceptable employment. Mr. Surveyor Scott remained in charge of the Government.

COAL TRADE OF GREAT BRITAIN.—There are upwards of 3000 coal mines in Great Britain, which employ nearly 250,000 men, women, and boys, underground and above, termed hewers, putters, trappers, overlookers, banksmen, &c. The capital invested in working stock, tramways, staiths, and harbours, altogether exceeds 30,000,000*l.* in value; and the "get of coal," as it is technically termed, amounts to 34,000,000 tons annually; the estimated value of which, at the "pit's mouth," is 10,000,000*l.* Of this enormous quantity of coal one-third is raised in the Northumberland and Durham districts, from whence the chief exports of the kingdon are made by the rivers Tyne, Wear, and Tees, both foreign and coastways. The chief points of home consumption are in the ironworks of Staffordshire, South Wales, and the West of Scotland; which, with the lesser works of North Wales, Shropshire, Yorkshire, and Derbyshire, consume nearly one-third of the whole. The residue is consumed in smaller manufactures generally, such as those of cotton and woollen, the salt works, &c.; and by the population of large towns for domestic purposes.—*Report on Coal Traffic, by Braithwaite Poole, Esq, F.R.S.*

METROPOLITAN SEWERS.—A parliamentary paper of 22 folio pages has just been printed, showing the receipts and expenditure of the General Commissions of Sewers in force from the 1st January, 1845, to the 31st December, 1849. The total receipts for the five years (1845 to 1849), including the general cash balance in hand on the 1st January, 1845, was 470,778*l.* 9*s.* 10*d.*; whilst the expenditure in the period was 461,543*l.* 15*s.* 11*d.*, leaving the general cash balance in hand on the 31st December last 9234*l.* 13*s.* 11*d.* The receipts from the 8th October to the 31st December last, a little more than two months, were 22,797*l.* 9*s.* 1*d.*, and the expenditure 19,974*l.* 0*s.* 7*d.*

Proceedings of Public Companies.

MEETINGS DURING THE ENSUING WEEK.

TUESDAY.....Deep River Mining Company—offices, at Two.
Colonial Bank—London Tavern, at Twelve for One.
Imperial Fire Insurance Company—offices, at One.
WEDNESDAY ..Guadalcanal Silver Mining Association—offices, at Two.
Union Bank of London—offices, at Twelve.
Royal Santiago Mining Company—offices, at One.
THURSDAY ....Arigna Iron and Coal Company—George and Vulture Tavern, at One.
City of Toronto and Lake Huron Railway Company—offices, at Twelve.
FRIDAY .....General Cemetery Company—offices, at Two.
East and West India Dock Company—offices, at Two.

[*The meetings of Mining Companies are inserted among the Mining Intelligence.*]

CAMERON'S COALBROOK STEAM COAL AND SWANSEA AND LOUGHOR RAILWAY COMPANY.

An extraordinary general meeting of shareholders of this company took place at the offices, Moorgate-street, City, on Tuesday, the 2d instant, to consider a resolution passed by the directors for making a further call of 2*l.* per share, for the purpose of making the line of railway from the Coalbrook coal-fields to the port of Llanelly, and for other purposes.

E. G. WINTHROP, Esq., in the chair.

Mr. HOWDEN, the secretary, read the following notice to the meeting:—

Whereas the funds or property of the company, at the disposal of the board of directors, being insufficient to carry on the concerns of the company, and it being thought advisable to call for more than 8*l.* per share of the capital or joint-stock of the company for the purposes of the company, the board of directors did, on the 15th day of June instant, come to a resolution, in the words and figures following—that is to say:—"Resolved, that all the co-partners shall be, and are hereby called upon to pay a further instalment of 2*l.* on the several shares held by them respectively, in the capital or joint-stock of the company, in addition to the several instalments, amounting together to the sum of 8*l.*, which have been paid, or called up on the said shares—such instalment of 2*l.* per share to be paid and payable on the 10th day of September, 1850, at the Commercial Bank of London." Now, notice is hereby given, that an extraordinary general meeting of the registered shareholders of the said company will be held at the company's office, No. 2, Moorgate-street, London, on Tuesday, the 2d day of July, 1850, at one o'clock in the afternoon precisely, for the purpose of entering into a resolution to confirm the said resolution of the board of directors.

The SECRETARY said the advertisement had appeared in the *Times*, the *Mining Journal*, and the two Swansea papers. He then exhibited a number of proxies from absent shareholders in favour of the resolution now proposed.

Mr. STRELLY would ask if all those shareholders who had sent in their proxies had paid their calls? (Hear, hear.)

The SECRETARY replied in the affirmative, and said the proxies represented from 400 to 500 shares.

The CHAIRMAN said, this extraordinary general meeting was called solely for the purpose of confirming the call which, on the 6th of December, 1849, was unanimously agreed, should be made by the directors at a meeting of shareholders. Although the meeting had been called for this purpose only, he expected, and was prepared, to answer a great many questions as to the present state of the company, and its future prospects. (Hear, hear.) He could assure the meeting that the directors would not think of making a further call on the shareholders, unless they had the greatest possible idea of its producing good to this dilapidated company—dilapidated from no fault in the property itself, for it was undoubtedly good, but from bad management; nor did he ever hear of one substantial reason why such a company could not be carried out profitably. (Hear, hear.) They had as good a mine—from the report of their manager, who had no reason to state anything that was false—if not the best, in South Wales; they had the finest coal there, and in great abundance, but they could not work it without the assistance of the shareholders. This company had been surrounded with difficulties, and the directors had to contend with a body of shareholders at variance with one another, which had brought them into their present state of depression, and had nearly lost them this valuable property. It was really marvellous how the directors had so long stood their ground; and nothing but a conviction of the real sterling value of their property could have induced him to adhere so long to the company. What was it now they applied for? Why, not a large sum of money, but only that which would make their property immediately profitable to the shareholders; and this sum of money must be had immediately, to save the property of the company. Their line of railway was now progressing daily, and, from their communications with Mr. Atkinson, they found it was going on satisfactorily. (Hear, hear.) Under their contract they had certain payments to meet each month, and a portion of the cost of the line was at that moment due. On receiving the estimate of the work done, the directors were bound to pay 30 per cent. upon it; this was one thing that was immediately pressing. Would it not be perfect madness to allow the line to be stopped for the small sum now required? The chairman concluded by urging the shareholders not to allow their property to be sacrificed, but to act unanimously in support of the resolution.

Mr. STRELLY said, he had great pleasure in moving that the resolution for a further call of 2*l.* be confirmed, from a conviction that the directors had not made that call from a momentary suggestion, but after much deliberate consideration. (Hear, hear.) It was really lamentable to see how their money had been hitherto frittered away. He was glad to see that the directors were now acting like men of business; and he had no doubt, by agreeing to this call, the shareholders would in a very short time be in a position to congratulate each other on having weathered the storm, and that they had been of the number who had stood by the ship, in spite of all dangers. (Applause.)

Mr. GODDARD (of Ipswich) seconded the motion. He thought it behoved all the shareholders to strengthen the hands of the directors at the present moment; indeed, nothing but that course would save the company. (Hear, hear.) He, for one, thought they were under great obligations to the directors, for the great exertions which they had displayed under the difficult circumstances in which they had been placed.

The CHAIRMAN then submitted the resolution as above described, which was passed unanimously.

The CHAIRMAN alluded to the valuable services of Mr. Smallbone, who came into the direction at a time when many were requested to join it, but all refused. He dare say it would be different now, for when the egg was full, there would be plenty to suck it. (Laughter.)

Mr. SMALLBONE (a director) felt satisfied that what they had done would be found, on reflection, satisfactory to the gentlemen who formed that company. He had met them on several occasions, and had always maintained that, if they had undertaken what they were now doing four or five years ago, they would have found themselves in a vastly different position. (Hear, hear.) Instead of putting their hands in their pockets, they would have been in the receipt of profits from a valuable property. He felt from the first time of joining the company the necessity of a transit for their coal; instead of looking to this, all the schemes adopted by the board had been futile. It was a pleasure to find that the directors now saw the necessity of doing so; and, in three months' time, he hoped to see this company in a position to bring their coal to market fairly and honestly, and even by that time to afford the shareholders something for their patience. (Applause.) He had worked for them in their difficulties, and he was not going to work backward, but would work forward; for, in doing so, he saw the greatest chance in the world for the board of directors, with the co-operation of the shareholders, making this a most profitable undertaking. (Hear, hear.) If the shareholders would now support him and his co-directors, he would continue to stick to his work, though at inconvenience to himself, and do his utmost for the benefit of the shareholders.

Mr. STRELLY said, a friend near him stated that many would now, he dare say, pay their calls without law proceedings. (Hear, hear.)

Mr. SMALLBONE said, he had always set his face against law proceedings. The directors would have no objection to extend the time to suit the convenience of shareholders. It must be borne in mind that they were not going into the payment of large sums; and that what the directors were now doing was for the benefit of themselves, as well as their brother shareholders. He trusted they were now in such a position that the shareholders in default, from their own good senses, would see the policy of paying up their shares, not only for their own benefit, but as an act of justice to the other shareholders, who had paid their calls punctually. (Hear, hear.) It would be bad policy of any of them, he thought, postponing this act of justice too long, or till they saw great advantages to be obtained; for they might then come to ask favours which he and the other directors might not be very willing to grant. (Laughter.)

A SHAREHOLDER asked about the coal produce.—Mr. SMALLBONE replied, that as soon as the transit was ready they could put on the line 200 tons a day, or 70,000 tons a year.

Captain NORCOTT, R.N.: And that from the present openings, and for three or four years in succession. (Hear, hear.)

The CHAIRMAN said, this would not only pay a large dividend to the shareholders, but would create a fund to be set apart for their great "winning," whereby their produce of coals might be increased to any amount. There was nothing, in his opinion, to hinder them from making this one of the first undertakings in the world as a coal company. (Hear, hear.)

Mr. HUGHES would have been glad, had the directors acted before as they were now doing, to have paid up his 10*l.* at once. (Hear, hear.)

The CHAIRMAN thought the best way to convince gentlemen, was for the shareholders at this meeting to appoint a committee to look into the whole matter for themselves. The directors would be happy to accede to it, for it might lighten their labours to some extent, and would, perhaps, tend more to satisfy the shareholders. (Hear, hear.)

A SHAREHOLDER thought this very straightforward of the directors.

The CHAIRMAN was glad to see a larger meeting than he expected, and hoped those present would tell other shareholders what had transpired at this meeting.

Mr. GODDARD wished to know what were the liabilities of the company at the present moment?

Mr. SMALLBONE thought it better to defer answering that question till the annual meeting at the end of this month, when the accounts would be fully prepared.

Mr. GODDARD asked if any of the creditors were pressing?—The CHAIRMAN thought they would not be so, now they saw directors were in earnest.

Capt. NORCOTT said that was the real fact, for it would be against their interest to be too pressing, seeing the directors were doing all they could to strengthen the company and to make it profitable; but the contractors must be looked to immediately. (Hear, hear.)

Mr. SMALLBONE said he could give a good reason for paying up this call, which was that by doing so the shareholders would work off 24,000*l.* of debt—that is to say, in the purchase money, which he thought ought to be very satisfactory. (Hear.)

Mr. HUGHES asked when the solicitors' bill would be forthcoming?

Mr. ELDERTON said, he knew nothing to prevent it being delivered some days before the next general meeting.

The CHAIRMAN observed, that it would be impossible to present a fair balance-sheet without the expenses of the solicitor. (Hear, hear.)

Mr. SMALLBONE would again impress upon the shareholders the real value of the property of this company, so widely different from many of the vagabond companies of the present day, which brought ruin upon thousands of innocent people.

Mr. ELDERTON wished it to be understood that no one had worked harder than himself since the commencement of the company.

Mr. GODDARD then moved a vote of thanks to the chairman and directors for their able and impartial conduct, and for the way in which they had striven to bring the company out of its difficulties. (Applause.)

Mr. GREEN seconded the motion, which was passed by acclamation.

The CHAIRMAN, in returning thanks, said he would only observe, on the part of the directors and himself, that he was extremely obliged by the honour done to the board by passing such a vote of thanks. It was certainly due to them he really believed; but in doing their duty to the shareholders, they were also doing it to themselves as large shareholders. To see this company swamped for the want of an inconsiderable sum of money, after all that had been expended, would be the height of insanity on the part of the shareholders, and for himself he was not so inclined, he could assure them; for he was convinced that, by the assistance of the shareholders, they would meet with a good reward in their future prosperity. (Applause.)—The meeting then separated.

LEGAL AND COMMERCIAL FIRE ASSURANCE SOCIETY.

The annual general meeting of this society was held at the company's offices, Cheapside, on Thursday, the 4th inst.

Mr. Alderman and Sheriff LAWRENCE in the chair.

Mr. BOWSER read the following report:—

Your directors have much pleasure in again meeting the shareholders at this annual meeting, and in being enabled to present an encouraging report of the affairs of the society. The past year has been one of considerable trial, in consequence of the formation of several new offices, some of which have, in some degree, interfered with the connection originally attached to this society; and particularly in consequence of the reduction, by the older establishments, of the extravagant rates charged on warehouses and other extensive premises, and the more active competition with this society which resulted therefrom; your directors, however, have the satisfaction to report that this competition, while it has proved most beneficial to the public, has not had the effect intended, of inducing the assurers with this society to abandon those by whom their interests have been so greatly promoted. Your directors have the satisfaction to report the appointment, during the past year, of 138 new agents; during the same period 2413 new policies have been issued, averaging 858*l.* each, and that the income of the society has increased from 7265*l.* 1s. 8d. to 8228*l.* 9s. 5d.

Your directors again refer to the principle on which this office is conducted—viz., the exclusion of all extremely hazardous risks, and the experience of the past year has fully confirmed them in their reliance on the soundness of this principle, inasmuch as, during the past year, your directors, adhering to this rule, have thought it their duty to decline several properties offered for insurance, which have been since destroyed by fire, whereby a loss of about 4000*l.* has been avoided.

The general character of the risks undertaken may, however, be better judged of by comparing the gross receipts of premium for the past three years with the claims for fires within the same period. The amount received for premiums has been 18,482*l.*; the claims paid, 8482*l.*: leaving a surplus of 10,000*l.* After defraying all the preliminary expenses, the amount paid for interest to the shareholders, the current charges of management, and the expense of establishing agencies, there remains still a disposable balance of 1034*l.* 3s. 7d.

This balance would have been greater, but for the large expenses necessarily incurred in the formation of the office, and in establishing about 510 efficient agencies in all parts of England, Wales, and Scotland: much of this expense will not arise again, and so much of it as consists in the establishment of agencies your directors are convinced will prove to be a good investment of the funds of the society, as by these means the business is daily increasing. The progress of the Society may be further manifested by a comparison derived from the parliamentary returns of the duties on fire insurances, paid to Government by this office, during the last three years—in 1841, the duty was 2043*l.*; in 1848, 4846*l.*; in 1849, 6460*l.*; and an inspection of the returns will also show that the rate of increase in the amount of duty paid by this office is greater than that obtained by almost any other establishment of however long duration.

By the terms of the Deed of Settlement, the following directors go out of office in rotation—viz.: William Cook, Esq.; Robert Ellis, Esq.; William Elliot, Esq., M.D.; Frederick James Hall, Esq.; and John Gladstone, and, being eligible, offer themselves for re-election. Your directors beg to recommend that interest, at the rate of 5 per cent., should be paid to the shareholders on the amount of the paid-up capital. It only remains to impress upon every shareholder the great importance of his using the utmost exertion among his friends and connections to promote the interest of the society. Your directors acknowledge, with much satisfaction, the strenuous efforts of many of their constituents, and they cannot doubt that the past success of the society will stimulate them to renewed activity and perseverance.

The CHAIRMAN, in moving the adoption of the report, entered into a lucid statement, in explanation of some points bearing on the position of the society, of a most favourable nature, and general satisfaction was expressed by the shareholders.

The report was adopted, and the retiring directors, who, it was stated, had given an average attendance at the office of 59 times each during the year, were re-elected unanimously.—Interest, at the rate of 5 per cent. per annum, was declared on the paid-up capital of the society.

After a vote of thanks to the directors, and also to the chairman, the meeting separated.

NEW ZEALAND COMPANY.—At an adjourned meeting held on Thursday, it was finally resolved to surrender the charter of the company to her Majesty's Government.

SOUTH SEA COMPANY.—At a court of proprietors, held on Thursday last the usual half-yearly dividend of 1¾ per cent. was declared, being at the rate of 3½ per cent. per annum.

GREAT INDIAN PENINSULA RAILWAY.—This company are about to freight 1000 tons of iron rails to Bombay for the construction of their permanent way.

RAILWAY CALLS FOR JULY.—The amount falling due during the present month is 2,479,892*l.*—of which 80,000*l.* is for foreign companies. The total amount of calls for the year is 8,694,984*l.*

MODEL REPORTING.—Mr. Ralph Dodd made a report to the Sunderland Docks commissioners on the 28th of July, 1794, on the river, harbour, and piers, the leading feature of which was the conversion of what is now called the Potato Garth into a wet dock of upwards of 13 acres in extent, with two pairs of gates. The lower entrance enabling ships to get out to sea at almost all times, and the upper entrance, as near the west end as possible, allowing ships and keels also to pass to and fro. The style of Mr. Dodd's report is much at variance with that of ordinary engineers, and the following sample will be amusing, if not instructive, to our readers:—"Does any one wish to have a just idea of the extensive trade of this port? On a sea tide let him go where once I stood; no sooner there, than casting my eyes to the southward, over the curling crystal flood, as Homer beautifully observes, I saw a wood of ships, a zephyr was gently fanning them to the port, all sails drew, and their streamers were waving in the wind. This prominent point (the pier end) where I stood, stretching on the sea, soon became thronged. Here, with glad steps, came some of Eve's fairest daughters. Some hung on their arm the cherub form, and by their side their tender offspring led. What glittering eyes of gladness were fixed on this fleet; some to parents, some to husbands, some to lovers! Does the artist want a subject of nature to paint joy and gladness by? He cannot be better served than here; and for sadness, on the days of departure, he would see the half-closed eye, with the crystal tear dropping down many a fair cheek."

HISTORY AND MANUFACTURE OF GUNPOWDER.—No. XI.

BY JOHN JOSEPH LAKE, OF THE ORDNANCE DEPARTMENT.

One of the most remarkable, as well as most recent, adaptations of gunpowder in Europe is in the war rocket. But the idea was by no means new. Indeed, Sir William Congreve never claimed the credit of originality. The Agneeaster of the Hindoos, which is supposed to have been a sort of rocket, has been already referred to, and, during the middle ages, there appears to have been something of a kindred nature used in Europe. Joinville states that "it was thrown from the bottom of a machine called a petrary, and that it came forward as a large barrel of verjuice, with a tail of fire issuing from it as big as a great swan, making a noise in its passage like thunder, and seeming like a dragon flying through the air, and, from the great quantity of fire it threw out, giving such a light that one might see in the camp as if it had been day." So terrified was the army of King Louis at it, that a knight, named Gautier de Cariel, recommended that, when one was discharged, they should all fall prostrate, and beseech God to deliver them from the danger against which he alone could protect them, which was actually done. It is thought by some that this is a description of the celebrated Greek fire, but it would certainly seem rather to apply to a rocket than a burning liquid. The first certain account of the war rocket in Europe occurs in a work entitled *Traités Militaire*, by Hanzelet, published in 1598. A chapter in this work is headed "*Comme l'on peut tirer droittement une fusee à fleur d'orizon ou autrement*," and in it is a description and wood-cut, showing the use of a rocket for military purposes. General Desaguliers tried many experiments, with the view of bringing it into use, but eventually abandoned the idea. Sir W. Congreve was, however, more successful, for he rendered the flight of this weapon more regular, and gave it a greater range. He also considerably reduced the length of the stick, and removed it from the side to the centre of the rocket. He further improved it by making the case of sheet-iron.

On the first introduction of the rocket, it was imagined that it would supplant, or totally alter the practice of artillery, and that it would be equally applicable for battering fortifications or slaughtering men, and Congreve proposed that cavalry, infantry and artillery, should alike be furnished with a supply, and it certainly seemed to possess peculiar advantages. Its magnitude seemed unlimited; it is very portable, free from recoil, can be rapidly discharged, and is very destructive to buildings, setting fire to them when discharged amongst them. These sanguine expectations have not been realized, a want of sufficient regularity in flight rendering the rocket unfit for many purposes. Nevertheless, it is a useful and important arm, and further improvements of it may yet be admitted into the service.

The rockets now used in the service do not at all come up to the dimensions that Congreve first intended should be made, and they fall immeasurably short of some of which travellers give us descriptions. In Col. Symes's *Embassy to Ava*, page 173, it is related that "the display of rockets was strikingly grand. The cylinders of the rockets were trunks of trees, 2 or 3 ft. in circumference; these were bound by strong ligatures to thick bamboos, 18 or 20 feet in length. They rose to a great height, and, on descending, emitted various appearances of fire that were very beautiful." Col. Symes, page 432, referring to some still larger rockets, says that, for cylinders, "the trunks of trees, bored in the manner of a pump, were used—the cavity of the cylinder 9 or 10 inches in diameter, the wood 2 in. thick, and length from 12 to 20 ft." Some of these rockets are said to weigh from 1000 to 2000 lbs.; and in Siam, it appears that they are used as instruments of execution—the criminal being bound to one, it is either discharged perpendicularly or along the ground, and the unfortunate creature is thus put to death in a most cruel manner. These large rockets show the great familiarity which the natives of the East have with their manufacture; it will not, therefore, be a matter of wonder to know that they used them much as we have them at present a long time before us. In the translation of the *Memoirs of Eradut Khan*, a Hindoo nobleman, by Capt. Jonathan Scott, of the company's service (London, 1786), "a rocket's flight" is frequently given to denote a certain distance; and the translator, in a note at page 36, says—"The rocket in India is used in war, and the chamber being made of iron, does execution wherever it strikes, but cannot be sent in true direction; it will reach from 300 to 400 yards."*

Some experiments were conducted in India in 1824, as to the relative merits of Congreve's rockets and some prepared by Major Parlby of the gunpowder-works at Allahabad; and it would appear by the report of the committee that the latter were much superior in regularity of flight and direction. But Major Parlby's improvements have not been adopted, owing, it would seem, to some difference as to the amount of compensation to be granted him.

Rockets were originally made with a shot, or shell, at their head, according to the nature of the service for which they were designed. They are now, however, only prepared with shells, because they answer equally well for shot, by emptying them of powder. Rockets are generally discharged from tubes or as a ground volley. The tube for the purpose is open at each end, and the necessary degree of elevation is given by a sliding support and screw at the back part of the tube, a graduated scale being attached to the upper portion, by which the degree of elevation is taken. A ground volley is fired by laying the rockets at specified distances from each other on the ground, and connecting them together by quickmatch. They may in this manner be fired in quick succession, the match carrying the fire through the whole series. For the first 100 or 150 yards, if the ground be tolerably level, they will advance near the surface; but after this they rise, and rush about in a most destructive manner—hissing and plunging, and changing their course at every impediment they meet, now losing their energy, and again starting as with renewed vigour into the thickest ranks, destroying and burning wherever they strike, and carrying confusion into the best disciplined corps.

Rockets have done good service upon many occasions; they were first employed at Boulogne in October, 1806, and "in about an hour," says Congreve, "about 200 rockets were discharged; the dismay and astonishment of the enemy was complete—not a shot was returned—and in less than 10 minutes after the first discharge the town was discovered to be on fire." They were subsequently used at Copenhagen, Leipsic, Algiers, and other places. At Leipsic, it is related that a mass of French infantry laid down their arms at the first volley of the new weapon, terrified at the devastation and slaughter it effected.

Rockets are of a very perishable nature; the cases are soon eaten through, there being nothing but a lining of brown paper between the composition and the case; and the strong affinity that exists between the nitric acid of the former, and the metal of the latter, no doubt, greatly accelerates the result. They also suffer, and, in fact, become dangerous, when exposed to extremes of heat and cold, from the alternate expansion and contraction of the cases, causing a separation between the composition and the case. It would seem, however, that both these evils might be cured by one remedy—viz., by placing a tube of India-rubber between the composition and the case. By boiling the caoutchouc first for about 20 minutes in water, a degree of elasticity would be given to it that cold would not overcome; and it would expand as the heat increased, and thus filling out the case, would prevent any chance of explosion. The India-rubber would also effectually cut off any communication, and prevent chemical action taking place between the composition and the metal.—*Portsmouth, July 2.*

PREPARATION OF MINERALS FOR PULVERIZATION.—Mr. W. Browne, mine agent, of St. Austell, and Mr. R. R. Veale, of St. Columb Major, have recently patented some improvements in preparing, for pulverization, flint-stone, china-stone, ores, minerals, spars, sands, earths, and other substances. The breaking down of flint-stone, china-stone, ores, minerals, spars, sands, earths, and other natural substances, and also artificial substances, such as glass, vitreous matters, and slags, requiring to be reduced to a pulverized state, is a tedious and costly process; and although the cost of such process, with some natural matters, is considerably reduced by subjecting them to a preparatory calcination, still the breaking down of the calcined matters is expensive. Now, this invention consists in preparing the above-mentioned substances for pulverization, by exposing them to a high degree of heat, but not so as to fuse the same, and then subjecting them to the action of water. In carrying out the invention, the patentees prefer to bring the substances to a bright red heat, and while in that state to suddenly immerse them in water; but, instead of immersing the hot substances in water, the hot water may be thrown on to them, or steam may be admitted amongst them. By thus treating the above-named substances, the process of pulverization may be much more easily carried on. It is stated that this invention will be found particularly advantageous for preparing materials to be used in the manufacture of china, glass, earthenware, and porcelain; for facilitating the extraction of metals from ores; and for preparing materials for making paints, manure, and cements. The patentees claim the preparing flint-stone, china-stone, ores, minerals, spars, sands, earths, and other substances, by heating the same to a high degree of heat, but not so as to fuse the same, and then subjecting them to the action of water.

* Eradut Khan lived at the beginning of the eighteenth century.

MINING IN THE EAST OF CORNWALL.

[FROM A CORRESPONDENT.]

Having returned from a visit to Cornwall, I forward you particulars of a few mines which I had an opportunity of inspecting:—

WHEAL SHEBA (Stoke Climsland).—This sett has now commenced working, under the management of Mr. Vatcher, of Exeter, with every prospect of becoming a rich and productive mine. The lode in the adit end contains good stones of ore, averaging 6½ per cent., by the assay of Mr. Harvey, of Liskeard. It is situate to the west of the great cross-course which bounds the copper ore of the Callington district. That talented and scientific geologist, Mr. Evan Hopkins, has visited this mine and the adjoining one (Wheal Tom), which is situate in Deer Park, Stoke Climsland, at the foot of Kit Hill, and contains several tin and copper lodes in a congenial stratum, and, at no distant date, will prove a productive spot for mineral riches. At present there has been a small adit driven, and a shaft or two sunk, sufficient to show the prospects of the undertaking.

From thence we proceeded to TRETHEVY MINE, situate within the range of the Caradon district. The engine had been erected (45-inch cylinder), and had that day commenced operations, amidst vociferous cheers of the miners. We understood the shaft had been sunk to the 30 fathom level. The water being too powerful to be kept by the water-wheel, they were compelled to erect an engine to fork it; the old adventurers having declined to do so, the property fell into the hands of Mr. Vatcher, who soon obtained a spirited company to carry on the operations, and it is now worked with spirit and vigour, under the superintendence of that active captain, John Seymour, who seems to understand his work well. We understand the South and West Caradon cross-course runs through this sett, which is in killas, and within a few hundred fathoms south of both the above mines, with every probability of becoming, after the expenditure of a few thousands, equally as productive. It is nothing but fair to state, that the money already expended under the direction of Mr. Vatcher, Capt. Seymour, and Mr. Mathers, engineer, has been expended with the strictest economy. This looks well for the future workings. At Caradon Vale they were busy in building the engine-house, the engine being already purchased, and on the mine. In the course of a few weeks it will be erected, and at work. This is also under the management of Mr. Vatcher, who has a strong and respectable company of the gentry in the vicinity of Exeter.

WHEAL GILL will shortly go to work under the same parties. We are glad to see our Devonshire friends, whose hospitality is unbounded, and whom we wish a most hearty success in all their undertakings, have chosen such excellent spots for the outlay of their spare capital, and if prudence, talent, economy, and good management can make good mines, combined with the geological features of the county, the strata and the lodes, there can be little question that the result will be a handsome return for the outlay made.

After our day's work, we adjourned to Webb's Hotel, Liskeard, where, with Mr. Evan Hopkins in the chair, an evening of enjoyment was passed, and best wishes expressed for success to Trethevy Consols, which was responded to by Mr. Vatcher, and followed by speeches from Messrs. Hopkins, Matthews, Bartlett, Seymour, Spargo, &c.

CARADON UNITED, in the same district, has been worked with spirit, but with little success at present, although it is supposed the riches lie a little further east; if so, they may obtain them, as, from their spirited outlay, they deserve success,

Further to the east lays the great gun of the year, PHŒNIX; here Captain Seccombe has met with that which he has so long sought for, and which he so richly deserves—a rich and productive mine. There is no mistake here; the lode is worth at least 100*l.* per fm., and the ore the richest in Cornwall—12*l.* 6*s.* per ton, as last sampling shows. This has been obtained through the prudent management of Capt. Seccombe, who, we were informed, was offered an annuity by a German, who held a large interest in the undertaking, to give up the mine. Capt. Seccombe replied, "No; I must pay you back the money I have expended for you, and the interest." We understand, from good authority, that although the mine has been working for nine years, the whole of the expenditure will be repaid out of the returns made this year; and a gentleman at Manchester, who is a large holder in the undertaking, has been the means of keeping the mine going to the present time. We say he deserves the thanks of the adventurers, and we heartily congratulate Capt. Seccombe on his success, and hope he will live many years to enjoy it.

At WEST CARADON we met Capts. Buzzo and Dunstan, both of whom gave us every information respecting the mine, and treated us with the greatest hospitality. Here they have what many others want, a good and productive mine, with every appearance of a lasting one.

We left here for BODMIN MOOR CONSOLS, where we found they had made a recent discovery of a fine tin lode, worth 50*l.* per fm., with every probability of increasing as they get deeper. The sett is large and extensive, with several other lodes in it, and all machinery erected for proving the mine, and stamping the ore for market. There was about 4 to 5 tons of tinstuff at surface, averaging 45*l.* to 50*l.* per ton, with plenty of water-power for all mining purposes.

TREGEAR CONSOLS (St. Kew).—We found several new discoveries in this sett of antimony and silver-lead lodes, which, from appearances at surface, contain riches in depth. The miners were busy in carrying on operations on the mine, and dressing the ore on the floors, which lay in abundance. From the appearance of the country, combined with the size of the lodes, and the gossan and ore already raised, there can be little doubt of this making a rich and productive mine, and worthy of the attention of capitalists.

On our return we visited the Exeter district (Hennock), particulars of which I will forward you for next Journal.

WHEAL MAY MINE—FACTS, NOT FICTION!

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—Exaggerated statements in mining statistics are, as you well know from long observation, more calculated to divert the attention of capitalists from mining adventures than even doubtful opinions as to future prospects, or the questionable character of individuals to whose management funds may be intrusted. In your Journal of the 22d June, appeared an account—I will not say report—of a meeting of Wheal May adventurers. I am sorry a good report of that meeting was not given, or that a paragraph, containing a summary of the proceedings, did not occupy the space allotted to your reporter's.

Reference was again made to the meeting I allude to, in last week's Journal, in answer to a correspondent, who had signed himself "Miner, Camborne;" and it is to your reply there given that I more particularly address myself. For the insertion of my letter, I shall hold myself indebted to your kind courtesy. Your reporter was certainly not in error in recording, with his other notes, the statement which in the Journal was "*purposely omitted, as being so extravagant.*" Many assays have been made of ore from the newly-discovered valuable lode in Wheal May sett. The result has been more favourable than even the announcement of a yield of 26 per cent. of copper, and 100 ozs. of silver to the ton of ore would show. This is no exaggeration; neither has this return been *entirely* given from *selected* stones. One of the adventurers, in order to see that the mine was actually opened, went from London to Cornwall, and visited the workings. This gentleman is a tradesman of high standing in the City; and had no idea whether the ore he saw was worth a ducat or a diot. Before entering into the adventure to any considerable extent, he determined to obtain an assay from an eminent and experienced analytical chemist, well known to him—unbiassed, and not connected with a single mine. With this view, he broke a quantity of ore from the lode himself; and, without selection, had a box filled and sealed in his presence. This was brought to London, and the ore crushed to a fine powder. A portion was then handed to the scientific gentleman alluded to; and his analysis shows 32·6 per cent. of copper, in addition to the silver.

From other samples obtained from the same lode, the following are the results ascertained by the same analyser:—"500 grs., after cupelling, equal to 2·08 grs. of silver, which is equivalent to 149·09 ozs. of silver to the ton of ore. Another 500 grs., taken from a fresh lump of the same sample, and assayed in the same way, gave, after cupelling, 2·12 grs. of silver, which is equivalent to 151·96 ozs. of silver to the ton of ore: 100 grs. of the same sample, but from a fresh lump, analysed in the wet way for silver and copper, gave 0·58 of chloride of silver, which is equivalent to 156·83 ozs. of silver to the ton of ore; there was besides rather more than 26 per cent. of copper. The other sample—one large lump, and two smaller ones, were treated separately; 500 grs. of the larger lump, previously well pulverised, yielded 2·26 grs. of silver, which is equivalent to 161·99 ozs. (nearly 162 ozs.) of silver to the ton of ore. The two smaller lumps, being pulverised together, and then assayed like the above, 500 grs. yielded, after cupelling, 0·51, which is equal to 36·59 (say, 36½) ozs. of silver to the ton."

With such results as these, admitting that some of the samples were selected, the fact is strongly proved that a statement of the mine yielding 26 per cent. of copper and 100 ozs. of silver to the ton, is not an absolute friction. But, further, the results given above are confirmed by other assays—particulars of which I am ready to show to any person; but cannot encroach too far upon your kindness by asking for the space which their insertion would occupy.

A still more startling confirmation of the richness of Wheal May Mine has come to light. I believe I can openly assert, that the committee of Wheal May Mine are prepared to prove, on the oath and testimony of respectable individuals, that stones of ore were *removed from Wheal May workings to a new mine, now being extolled before the public as having yielded a stone containing considerably more than those of which the assays are above given!* But we wish to be at peace with our neighbours; and it is not for me to enter into a contest with those who have committed this piracy.

I have no doubt but that our workings will soon more substantially confirm the announcement you considered "extravagant;" and, as proof of the confidence which shareholders have in the mine, I am happy to announce that there is daily an increasing interest; and now that the mine is before the public on its own merits, and a unanimous committee formed, the quibbles of disaffected individuals will no longer interfere with the welfare of the adventurers.—HENRY PEET, Secretary: *Old Broad street, July 5.*

Mining Correspondence.

BRITISH MINES.

ALFRED CONSOLS.—The shaftmen will resume the sinking of Field's engine-shaft under the 70 fm. level on Tuesday, the 2d instant. The lode in the 70 fm. level, west of said shaft, is without change since my last report; and at the same level east the lode is quite equal to the last week's report—that is, worth 90*l.* per fm.; and the lode in the winze sinking under the 60 fm. level, east of the engine-shaft, is from 6 to 8 ft. wide, worth from 90*l.* to 100*l.* per fm. There is no change in any of our other tut-work operations during the past week; our tribute pitches are looking well.

BARRISTOWN.—The lode in the 30 fm. level east is small, but carrying very regular walls; during the week we have had a branch of lead in the bottom of it, about 1¼ in. wide. This end has been now driven about 14 or 15 fms. on the lode, and there should be a winze sunk in the bottom of this level, to prove it going down. The lode in the rise in the back of the 26 fm. level continues pretty much the same, making lead very irregularly, sometimes a branch 3 in. wide, and at other times very little. The men stoping the ground to the east of it have very little ore at present. In the winze sinking under the 30 fm. level we have a lode which came in from the north side, about 1 ft. wide, orey part 3 in. thick, thinly mixed; although it came in very irregular, it is now forming a better wall as it goes down. I consider this the part of the lode we drove the 30 fm. level west on, and at the 30, the south part of the lode driven east on is 2 fms. south of this part, which may also be the same in this level; this may be accounted for by the winze in sinking not taking so great an underlay south as the lode; we can soon prove this by driving a few fathoms south in the 40 cross-cut, and also by stoping on the course of the lode in the bottom, or under the 30 fm. level, when the winze is holed, which cannot possibly take more than a few days longer to accomplish. The cross-cut in the 18 fathom level driving south presents no change. The lode which is now forming in the bottom of the winze should be driven west, or in the 40, as its course will be a cross-cut for the new lode.

BEDFORD UNITED.—The lode in the 103 fathom level east is still worth 4 tons of ore per fm. In Andrew's winze, in this level, the lode is rather improved, being 2½ feet wide, and producing saving work. There has been no lode taken down in the 90 and 80 fm. levels. Bray's winze, in the 90, is communicated to the 103 fm. level, and the men are set to stope west in the back, in which the lode is worth 4 tons of ore per fm. The pitch in the back of the 80 fm. level is still yielding 6 tons of ore per fm. The lode has been taken down for about 3 fms. in length in the 70 fm. level, and is about 2½ ft. wide, producing good stones of black and yellow ore—a kindly lode, but not rich. We weighed, at Morwellham on Friday, April ores, 118 tons 9 cwts., and sampled May ores, computed 116 tons.

BODMIN MOOR CONSOLS.—Our lode improves in going down; it is now 3 ft. wide, tinny throughout. Our stamps are erected, and the floors nearly complete, with a good pile of stuff ready for stamping. The tin is fine, and free from both mundic and woolfram.

CARADON VALE.—Our operations here are progressing with much satisfaction; the engine-house is up, and the roof on. The engine is on the mine, and the engineers are busily engaged putting it in; it is a very good piece of machinery—I never saw a better little engine took abroad. The boiler is 11 tons weight, and a very good one, worth full 130*l.* The shaftmen are engaged cutting costean plat for water cistern, and fixing lift for same. The engine will be in course of working in about three weeks.

DAREN.—The bottom, or new adit, is got into an orey lode for 2 or 3 feet wide, not rich, but with sufficient inducements to show the value of the ground before us. There is also a large stream of water cut in the cross-cut from the western engine-shaft towards the Cwmsymlog lode, with some ore in the heads of slate, and lamina of carbonate of lime, the water being of a highly coloured ferruginous cast. The ore ground throughout the mine has generally improved, and miners are every day seeking to take bargains, to raise ore at rather low tributes. The crusher will be delivered in a few days, the driving gear is erected.

DEVON AND COURTENAY CONSOLS.—We have had a hard floor of ground in the engine-shaft since my last report, which has retarded our progress in sinking, but I am glad to say that it is leaving the shaft, and a better shift of ground is coming into it, which is strongly mineralised; there are branches of copper ore, mundic, &c., in it, which strengthens my opinion that we shall have an improvement in the next level. The 50 end is unproductive, and the ground at present rather hard. There is no alteration to notice in the pitches this week.

DYFNGWM.—We have set a new stope in the bottom of the adit level west of the sink steel ore; the lode is large, and very orey, and throughout there appears a change in the strata, the clay-slate being of a softer nature and lighter colour, by far more congenial for lead, and not so much impregnated with blende and copper. We have communicated the sink steel ore below the 16 fm. level with the rise above the 22 fm. level by means of a borer; there is about 9 ft. of ground to cut, and then we shall have a direct communication from the adit to the 22 fm. level. In Davies's stopes the men have stoped 3 fms. 1 ft. 10 in. of ground; the lode is large, and producing some good lead, but it is impregnated with blende and copper. In Thomas's winze the lode is full 8 ft. wide, mixed with clay slate, quartz, carbonate of lime, copper, and lead; knowing that copper and lead ore is a good omen, we may expect to see the lode get more defined and settled at a deeper level. Evans's winze, west of engine-shaft, has not been sunk during the past month, the water being in; the men have been engaged stoping a piece of ground from the bottom of the diagonal shaft to the engine-shaft, to let off the water from the 22 fm. level. I intend to-morrow to set the clearing of the diagonal shaft to three men. In the dressing department we are progressing favourably; I hope to get 12 tons for shipment by Saturday next. I must conclude by saying that no time shall be lost in carrying out the works mentioned in my report, and have every reason to believe that, when we can see a 42 and 52 fm. level open, we shall have a first-rate mine.

EAST CROWNDALE.—The lode in the 40, west of middle shaft, has improved since we commenced driving, and is now in the present end worth 10*l.* per fm.; in the end driving east at this level the lode already seen is 4 ft. wide, producing a little tin; but we believe that more lode remains to the north, which we intend taking down next week, and will inform you of its value as soon as possible. We are also happy to say that this lode is altered in its appearance, of a very favourable character, and we would, therefore, recommend sinking the middle shaft as soon as convenient. We have commenced a trial winze in the bottom of the 28, which will throw some light on the lode going east; this winze is already sunk 5 ft., and the lode in the bottom is worth 5*l.* per fm. It is not yet convenient to increase our tribute pitches. Our sampling will be at about the usual time, but as to quantity we cannot now speak accurately, as a great portion of the work remains yet to be stamped, but we expect not less than 10 tons. As regards driving at any intermediate point, we are of opinion that this is unnecessary while we drive the 40, and we do not think of driving on the north lode as yet.

EAST TAMAR CONSOLS.—Our usual monthly survey was held on Friday, and I beg to hand you the following remarks on the operations for the current month. The 70 fm. level north is still in a hard bar of ground, and the lode is unproductive; but there is a good lode in the level above, and in a winze sunk a short distance before the end. We are, therefore, in daily expectations of a favourable change. In the 60 end north the lode is worth 7 cwts. of ore per fm., and likely to improve. In the 60 end south the lode is composed of gossan, spar, and lead, worth about 6 cwts. of ore per fm., and altogether presents very promising indications. In the 26 fm. level, north of Furzhill shaft, the lode is composed of capel and ore, yielding good work. Caroline's shaft is sunk 10 fms. below the 11 fm. level, under adit, and we have commenced driving north and south on the course of the lode, which is very easy for driving, and will yield good profitable work. In the 26 fm. level, north of Church-lane shaft, the lode is 4 ft. wide, and worth 6 cwts. of lead per fathom. South of the shaft this level is cleared for upwards of 30 fms., and we have discovered ground that will set at a moderate tribute, and pay well; we have set two pitches in the back of this level, at 10s. and at 10s. 6d. Gullett's engine-shaft is being cleared, and, as we are not incommoded with water, we are making rapid progress. Gullett's whim-shaft is also being cleared, and we shall soon be in a position to clear the levels. The tribute department continues to yield the usual returns, with a fair prospect of improvement.

ESGAIR LLEE.—Our pay and setting was on the 29th June, of which the following is an account:—The deep adit, west of the junction, on the caunter lode, by six men, 4 fms. stent, or the month, at 5*l.* 10*s.* per fm. The 12 fm. level, east from the surface, on the caunter lode, by six men, 4 fms. stent, or the month, at 5*l.* per fm. A winze to sink below the 12 fm. level from surface, on the caunter lode, by nine men, 3 fms. stent, or the month, at 9*l.* per fm. A winze to sink below the mouth of the shallow adit, on the caunter lode, by six men, 4 fms. stent, or the month, at 5*l.* per fm. The stopes in the bottom of the shallow adit, west of Morgan's winze, to carry all the lode, or 4 ft. wide, by six men, 8 fms. stent, or the month, at 2*l.* 15*s.* per fathom; the stopes in the bottom of the shallow adit, east of Morgan's winze, to carry all the lode, or 4 ft. wide, by six men, 8 fms. stent, or the month, at 2*l.* 15*s.* per fm. The caunter lode, in the deep adit, west of the junction, is 3 ft. wide, and will yield about 10 cwts. of ore per fm.; the same lode, in Owen's winze, below the 12 fm. level, is 3 ft. wide, yielding about 20 cwts. of ore per fm. The caunter lode in the 12 fm. level, east from the surface, is much disordered with blende and mundic, and produces 5 or 6 cwts. of ore per fm. The caunter lode in Harding's winze, below the mouth of the shallow adit, is improved since my last, and yields 10 or 15 cwts. of ore per fathom. The lode in the stopes in the bottom of the shallow adit, west of Morgan's winze, will yield about 15 cwts. of ore per fathom; ditto, east of Morgan's winze, 6 or 8 cwts. of ore per fm. The erection of our machinery is completed, and on Saturday we set it to work for mere trial, and it appears to be quite master of its work, and in the course of a few days we shall be ready to work at full speed. The incline, and a few other trifles attached to the same, not being quite finished, I have contracted with Mr. J. Humphreys, builder, of Aberystwith, to connect the Plynlimmon stables into four convenient cottages for our mines, also a four-roomed dwelling-house adjoining the hotel, according to the plan and specification, and to provide all the materials of every description for the sum of 140*l.*, and to finish the whole in three months.

HAWKMOOR.—Capt. John Seymour having been requested to inspect this mine, has forwarded us the following report:—My first object was to survey the mineral stuff at surface, where I saw some rich piles of copper ore; my next was to descend to the bottom of the shaft, which is only 30 fathoms deep; in the western end of this level I was much pleased to find that your prospects are so good; this level is driven from the sump-shaft from 3 to 4 fms.; the lode here is very large, and rich in copper; the leader, or ore part, is about 18 in. wide, producing, I think, from 3 to 4 tons of rich ore per fm. in height and length, and promising an improvement; the other parts of the lode are composed of peach, spar, and mundic, with a large quantity of can, the lode altogether is about 4 ft. wide. I also examined the lode in this end of the shaft, and found it to be a good lode for the greater part of the last sink from the 20 to the 30 fm. level. I could not get in to see the east in the 30, the water being in, but could see some parts of the lode, which appeared to be of a promising character; however, I saw sufficient in the level above to warrant, that if there be not a good course of copper east in the 30 in a very little way down, there must be a good lode met with, there being a pitch working in the bottom of the 20, on a good course of ore. A large pile of tributers' ore was in the level—a richer looking pile of yellow copper I have not seen for many years, and the lode is rich in copper in many places in these bottoms. From what I saw of the bottom of the 20, both east and west of the shaft, and the lode in the 20 ends, I scruple not to say that as soon as you can extend your levels east and west in the 30, sufficient to admit of stoping the backs over that, you may begin to pay dividends; and I would say that I have not for some time been in a mine that at so shallow a depth promises better to pay the shareholders for their outlay than the Hawkmoor, but there must be a little perseverance. Your shaft ought to be sunk 10 fms. deeper as soon as possible, and the 20 and 30 ends ought to be in course of driving, with six men in each.

HEIGNSTON DOWN CONSOLS.—The lode in the 35 fm. level, east of the cross-cut, is worth 4 tons of ore per fm.; the winze below this level is producing some saving work for copper ore; the cross-cut south, in this level, is without alteration. The 45 fm. level, east of Victor's winze, produces some saving work for copper ore; the cross-cut south, in this level, is suspended for the present. Hitchin's shaft, sinking below the 20 fm. level, progresses satisfactorily, the lode in which is very kindly, producing occasional stones of ore.

HENNOCK.—We have very nearly completed the plat in the 10 fm. level, and have commenced driving north on the course of the lode. The lode in going north improves very much, and produces about 1 ton of ore to the fm., and there is now every appearance of its making a good paying one, even at that depth. We are also driving west in the adit level, to cut the western lode; the ground is working exceedingly promising, carrying a great many branches of gossan, soft spar, &c., all underlying west, and, no doubt, will fall into one large and, I hope, productive lode. I am now waiting your orders to have home the remainder of the pumps to fix, in order to commence sinking the shaft immediately for the 20 fathom level, which I am quite sure should be done without a moment's delay. Let us get down 10 fathoms deeper, and Hennock will rank amongst the principal mines of Devon and Cornwall.

July 3.—I have been to Hennock to-day, and the lode in opening north is getting much softer, and turning out some fine works in lead, and also some stones of copper.

HOLMBUSH.—We are still driving south in the 132 fm. level to reach the lode, the ground in which is favourable, and more water issuing from the end, which signifies we are near the lode. The lode in the 120 fm. level south is 5 ft. wide, composed of soft quartz, prian, and stones of lead. The ground in the 120 fm. level cross-cut south, towards the flap-jack lode, is much the same as when last reported on—a fair price for exploring it would be 3*l.* per fm. The lode in the 110 fm. level south is 20 in. wide, composed of soft killas, spar, and stones of lead. We have not been able to take down the flap-jack lode in the 100 fm. level, east of the great cross-course, during the week, the level being pretty well filled with attle, which we hope to clear in a short time, and then commence taking down the lode, the wall of which looks well. We weighed at Calstock quay, on Friday last, our parcel of copper ore, 127 tons 9 cwts.

KESWICK.—At Brandley there is a decided improvement in the 10 fathom level rise. The 20 fm. north continues to look very promising; the 20 fm. south looks well, with small strings of ore. The salt level, and the sump in salt level, are rather poorer. At Thornthwaite, the sump on the string is about the same as last week. In the cross-cut, on the vein, there is no alteration. The 17 fm. level forehead is looking well. The bottom level is much better, with nice strings of ore. At the Old Brandley Mine, we have put two men to clear out and timber up a level, which has not been worked for nearly 200 years, and which has always been thought, by those who have seen the end of the drift, to be left short of a fine pipe of ore, which is supposed to be going down, and has been worked out to-day. Since the water has been out of the 20 fm. level in New Brandley Mine we have taken these men off, being short of hands, so that we have not yet got to the end of the level. At another place we have been trenching to find the vein, which we hit upon about a week ago, but find it so broken up by a copper vein, which is crossing about that point, that we have thought it advisable to try higher up, where the vein is stronger. The place pitched upon is at or near the supposed junction of two strong veins, which we can trace further up. We have not yet reached the vein, but expect to do so every day.

KIRKCUDBRIGHTSHIRE.—The lode in the 62 end west is 4 ft. wide, with good stones of lead ore through it; we have holed the rise in the back of this level. The lode in the rise in the back of the 40 west is 4 ft. wide, with a deal of jack in it, and some fine stones of ore on the south side. Stewart's shaftmen are still widening the winze under the 40 fm. level, as the water has not been out to sink the shaft.

KIT HILL.—We have cut a cross-course in the 90 fm. adit, running nearly north and south, with much water issuing from it. We expect to reduce our price for driving, now 8*l.* per fm., considerably at our next setting. The end is now 35 fms. from surface. In the 53 fm. adit the ground is much improved for driving, price now given 20*s.* per fm.—the former setting 3*l.* 3*s.* Much water is coming from the end, and we soon expect to see the third lode by shoding. We have cleared up an old working 5 fathoms under the 10 fm. adit, on a lode north of engine-shaft: we find the ground stoped away for 10 fms. in length, and the lode in the bottom worth 40*l.* per fm.; as soon as machinery can be applied to the place, this lode alone will pay handsome profits.

LLWYNMALEES.—The stopes over the 8 fm. level are still looking well, but the mine, I regret to say, is standing still, in consequence of the water being in the 8 fm. level. I regret to say that there is not sufficient water to fork the mine until the engine is at work.

NORTH WHEAL FRIENDSHIP.—Buller's engine-shaft is now down 40 fms. from surface, and I have put the men to drive a cross-cut south from the bottom of the shaft, thinking there may be a part of the lode still to the south, but this will be proved in a short time. In the 32 fm. level, north from Cross's rise, there is a good lode, producing 10 cwts. of lead per fm.; there is also a good lode in the 32 fm. level, south from the above rise, worth full half-a-ton per fm. There are four pitches let in this part of the mine, varying in price from 7*s.* to 9*s.* 6*d.* in 1*l.* There are also four pitches in the old mine, at 14*s.* in 1*l.* each. We weighed at Morwelham 19 tons 6 cwts. 2 qrs. of lead.

PENZANCE CONSOLS.—Since our last report we have got a good lode of tin in the pitch over the 18 fm. level west, and the stopes under the 18 fm. level west are still looking well, and raising more tin than we have for some weeks past, and the ground is looking more kindly for tin going west. The pitches on the north lode are looking well. We have got a good lode of tin in Warren's pitch, and Boyne's pitch. On the whole, I believe we are looking better than we were at our last report.

SNOWDON (COPPER).—We have been very busy with carting the dressed ore down to Carnarvon during the last week, and the shipment to Liverpool will take place in a few days. I have now to send you the monthly account of costs, with 60*l.* to the debit of the mine, against which we have to show a return of about 30 tons of copper ore, in quality equal to the last, expected to net 5*l.* per ton. We are about to increase our mining strength by tribute labourers to work the three upper levels, so that you may calculate on an increased return of copper ore for our next shipment, for which we are already making due preparation. The repairs at the crushing mill will soon be completed, and then we shall be enabled to crush and dress the ore with greater dispatch, the machinery being equal to the work of 30 tons per day.

SOUTH PLAIN WOOD.—The following report has been received from Capt. Michael Stephens, late of Wheal Seton, now captain of South Plain Wood:—The caunter lode in the adit end is 4 ft. wide, composed of mundic, gossan, peach, and quartz with good stones of copper ore, of superior quality. We have another caunter lode some few fathoms further south, composed of ore, mundic, peach, and spar, about 12 in. wide. I took out of the river, on Camplin's lode, some good stones of ore. Nicholson's lode, which is from 3 to 6 ft. wide, is composed of copper, peach, mundic, and spar. We have many other lodes further south very kindly. We are still sinking the engine-shaft, and, from appearances, I have every reason to believe this mine will make a profitable concern when we get down deeper.

SOUTH TAMAR CONSOLS.—The engine-shaft is cased, divided, and made complete to the 112 fm. level. The shaftmen are now employed in extending north and south, but will recommence sinking as soon as their present stent is out. In the 112 fm. level the lode is 3½ ft. wide, carrying a good branch of lead on the eastern wall, and altogether very kindly, and easy for driving. In the 100 fm. level south the lode in the end is 3 ft. wide, composed of a tender can, and orey throughout, yielding from 10 to 12 cwts. of ore per fm.; this end has been extended 10 fms. 1 ft. during the past month, through ground that will set at a small tribute, and be very profitable; north, at the same level, the lode is 3 ft. wide, composed of fluor, horn-spar, and ore, worth, on an average, 9 cwts. of lead per fm., and leaving excellent tribute ground. In the 90 fm. level south the lode is yielding saving work, and getting larger and more regular; it is easy for driving, and the indications are very favourable. In the 80 fm. level south the lode is also much easier for driving, and improving for lead. In the 70 fm. level south the lode is still hard, and but slightly productive. Glynn's shaft is cleared about 4 fms. below the 80 fm. level, and we expect to hole to the 90 in the course of this month. The 30 end is suspended, and the men placed to rise in the back of the 100, north of the shaft. We have thought it advisable to do this, as the lode in the end is 4 ft. wide, all excellent stamps' work, but which cannot be returned until the steam stamping-engine is erected, and we have not space for depositing it. The pitches are generally looking well, particularly in the back of the 100 fm. level, where we have three working by four men each, at an average tribute of 3*s.* in 1*l.*

SOUTH WALES MINES.—Our pay and setting was on the 29th of June, of which the following is an account:—The shaft to sink below the surface, about 100 fms. east of the old workings, by four men, 2 fms. stent, or the month, at 6*l.* 18*s.* per fm.; the lode is 3 ft. wide, composed principally of quartz, slate, and lead, producing some saving work, but not sufficient to set a value on. I am glad to inform you Mr. Fugh has now a very promising lode within about 20 fms. of our sett, and has commenced to sink a new engine-shaft on same.

SOUTH WHEAL TRELAWNY.—The lode in the 50 fathom level north is 2½ ft. wide, composed of spar, barytes, mundic, soft killas, and spots of lead. We are still opening ground south of the cross-cut in this level on some strings of spar and mundic, in good killas stratum, but as yet they have not formed a junction. The engine-shaft has been sunk 10 fms. 4 ft. 5 in. below the 50 fm. level. We shall set the cross-cut to drive west in the 60 to intersect the lode in that level; the ground is still very favourable both for sinking and driving. The water is somewhat increased.

TAMAR (SILVER-LEAD).—In the 205 end the lode is small, but occasionally producing good stones of ore. In the 190 end the lode is 1 foot wide, composed of horn-spar, with a small quantity of ore. The 125 end is in slidy ground, and unproductive. In the 160 end the lode is 18 in. wide, and yielding work of a good quality. In the 145 end the lode is 3½ ft. wide, orey throughout, and opening good tribute ground. The 135 end is suspended for the present, on account of so much work coming from the tributers. Spurgin's shaft is sunk 2 fms. 3 ft. below the 145 fm. level. The shaftmen are engaged cutting plat, fixing pent-house, and other work preparatory to sinking. At the engaged cutting plat, fixing pent-house, and other work preparatory to sinking. At the 90 end, north mine we have commenced cross-cutting west, at the 90 fm. level. In the 80 end, driving north, the lode is 2 ft. wide, carrying a small branch of ore. In the 60 end the lode is 3 ft. wide, 1 ft. of which is saving work. We expect to sample on Saturday, the 6th inst., 85 tons of rich silver-lead ores.

TINCROFT.—On Highburrow tin lode, in the 152 fm. level, east of the engine-shaft, the lode is 6 feet wide, worth 25*l.* per fm. In the 142 fm. level, east of Martin's east shaft, the lode is 4 feet wide, worth 18*l.* per fm. In the 132 fm. level east the lode is 5 ft. worth 16*l.* per fm.; in the winze sinking below this level the lode is 4 feet wide, worth 15*l.* per fm. In the 110 fm. level, driving east from Cook's Kitchen, the lode is 4 ft. wide, worth 5*l.* per fm. for tin and copper. In the 100 fm. level, east of downright shaft, the lode is 3 ft. wide, worth 20*l.* per fm. for tin; in the 100 west the lode is 6 feet wide, worth 18*l.* for tin and copper. In the winze sinking under the 90 fm. level west the lode is 8 ft. wide, worth 30*l.* per fm. for tin and copper; in the 90 east the lode is 3 ft. wide, worth 8*l.* per fathom for tin. Grout's lode, in the 80 fm. level west, is 8 ft. wide, worth 60*l.* per fm. for copper; in the winze sinking below this level the lode is 6 feet wide, worth 65*l.* per fm. for copper. In the 70 fm. level west the lode is 5 ft. wide, worth 10*l.* per fm. for copper; in sinking below this level the lode is 5 feet wide, worth 8*l.* per fm. for copper. At North Tincroft, in the 110 fm. level east, the lode is 6 ft. wide, worth 35*l.* per fm. for copper; in the west end the lode is 5 ft. wide, worth 30*l.* per fm. for copper. In the 100 fm. level, east of Willoughby's shaft, the lode is 4 ft. wide, worth 18*l.* per fm. for tin and copper; in the 100 fm. level west the lode is 6 feet wide, worth 35*l.* per fm. for copper. In the 90 fm. level west the lode is 5 ft. wide, worth 40*l.* per fathom for copper; in the 90, east of Willoughby's shaft, the lode is 4 ft. wide, worth 8*l.* per fm. for tin and copper; in the winze sinking below this level the lode is 5 ft. wide, worth 20*l.* per fm. In the 80 fm. level west the lode is 3 ft. wide, worth 5*l.* per fm. for copper. In the 100 fm. level, driving west of Palmer's shaft, the lode is 2 feet wide, worth 5*l.* per fm. for tin and copper. In the 90 fm. level west the lode is 3 feet wide, worth 6*l.* per fm. for copper. In the 80 west the lode is 2½ ft. wide, worth 6*l.* per fathom for copper. In the 36 fm. level, driving west of Stainsby's shaft, the lode is 2 ft. wide, unproductive.

TREGEAR CONSOLS (SILVER-LEAD, ST. KEW).—The lodes we have cut in this sett, samples of gossan from which, containing spots of ore, I have sent you, we are now sinking on, and they improve in going down in settled grounds and at a greater depth I have no doubt will make abundance of ore; we have several tons on the dressing floors, which we are busy in getting ready for the market. We are also raising the stones for our engine-house, which we hope to get in course in a few days. They are returning ore at Treburget, on a parallel lode to ours, and at Wheal Sarah there is nearly 20 tons of ore and gossan on the dressing floors ready for market, raised from the lode which runs through our sett.

TRELAWNY.—At Phillips's shaft, in the 82 north the lode is 3 feet wide, worth 8*l.* per fm.; the stopes in the back of this level, north and south of the shaft, are not so productive as we could wish. In the 62 north the lode is 3 ft. wide, worth 9*l.* per

fm.; the stopes in the back of this level are much as usual. At Trelawny's the cross-cut in the 92 fm. level is driven towards the lode 5 fms. In the 82 north the lode is 2½ feet wide, worth 8*l*. per fm.; in the same level south the lode is 3 ft. wide, worth 8*l*. per fm. In the 72 north the lode is 2½ ft. wide, worth 8*l*. per fm.; the stopes about this shaft are looking fair. At the north mine, in the 68, north of Trehane, the lode is 1½ ft. wide, worth 4*l*. per fm. In the rise in the back of the 55 the lode is 2 ft. wide, worth 6*l*. per fm. We hope to communicate this rise with the 50, south of Smith's, in the course of a week or so, when we shall be in a position to take away some paying ground. In the 40, north of Smith's, the lode appears to be coming more settled, but still poor. The stopes in this part of the mine are not very productive.

TRELEIGH CONSOLS.—On Christoe lode, in the 100 fathom level, west of Garden's, the lode is 20 in. wide, with stones of ore. In the 90 fm. level, west of ditto, the lode is 2 ft. wide, worth 9*l*. per fm. In the winze below the 80 fm. level, on the north part, the lode is 20 in. wide, worth 10*l*. per fm. In the 70 fm. level, west of Garden's, the lode is 2½ ft. wide, worth 16*l*. per fm. In the stopes above the 70 fm. level, east of Steven's winze, the lode is 3 ft. wide, worth 15*l*. per fm. In the stopes west of ditto, the lode is 4 ft. wide, worth 20*l*. per fm. In the 80 fm. level, east of Christoe lode, the lode is 20 in. wide, worth 5*l*. per fm. The 52 cross-cut, north of the engine-shaft, is driving north to cut Parent lode. The 40 cross-cut, south of the engine-shaft, is driving south to cut the middle lode. In the rise above the 40, east of engine-shaft, the lode is 18 in. wide, not much ore. In the adit, east of Nicholson's, on middle lode, the lode is 15 in. wide, with good stones of ore.

TRESCOLL.—The lodes, since my last week's report, east in the bottom level, are greatly improved. The B lode No. 2, and B lode south and north, are nearly come together in the east; and I think, when they form a junction, they will make one champion lode, and a very rich one. We have taken down the lode this week in the side of this level, and found it good work. We are driving on the south B lode west of cross-course, and have a leader of tin in it 4 in. wide, nearly solid tin. Our back, west of cross-course, in the bottom level, has got a fine course of tin in it. Altogether the mine is improving.

TREVILLE (SILVER-LEAD).—Since my last report, the caunter has been driven 3 fms., and we find it more settled every fathom we extend on it; its character is precisely the same as before, and rather increased in size, being now more than 3 ft. wide. There cannot be a doubt but at the junction of this and the main lode in depth, we shall have a paying mine. The wheel-pit is finished, and the axle on the mine; I hope by Friday to have it in its place. The leat is also nearly completed, and I trust that in 10 days or a fortnight the wheel will be at work.

WEST WHEAL JEWEL.—The 85 fathom level, west of Williams's cross-course, on Wheal Jewel lode, is producing stones of ore. The lode in Treweek's winze, in the 70 fm. level, west of ditto cross-course, on the same lode, is worth 4*l*. per fm. The lode in Carkeek's winze, west of ditto, has not been taken down in the past week—when last reported it was worth 15*l*. per fm. The winze in the 57 fm. level, west of ditto cross-course, on the same lode, is unproductive. The lode in the 57 fm. level, east of Hodge's cross-course, on Tolcarne tin lode, is worth 25*l*. per fm. The shallow adit level, west of Tregoning's shaft, on the same lode, is worth 6*l*. per fm. The deep adit level, west of ditto shaft, on the same lode, is unproductive. The 12 fm. level, west of ditto shaft, on the same lode, is unproductive.; the stopes in the back of the 12 fathom level, west of Pryor's winze, on the same lode, are worth 16*l*. per fm.; the stopes in the bottom of the same level, on the same lode, east of ditto shaft, are worth 27*l*. per fm.; the stopes in the bottom of the same level, on the same lode, west of ditto winze, are worth 25*l*. per fm. The stopes are working on tribute.

WHEAL CREBOR.—At Cock's shaft the water is in fork; this morning I went underground, and found that the 24 fm. level was driven on the south lode about 10 fms. by the old company. I think this lode is distinct from any of the lodes in the old mine; the present end I consider to be a promising one; the lode appears to be fast improving, both in size and character; small branches of rich yellow copper ore are dispersed through the lode; and I have no doubt that, in driving on this end, good discoveries will be the result. I intend to put two men to clear the piles of stuff left in this level to-night, and to-morrow night to have some of the lode broken, and on Monday put a full pare of men there to drive. The 12 fm. level, on the south lode, I consider to be kindly. As Mr. Dean will be down shortly to inspect, I do not intend to do anything in this end more than to take down the lode, as everything is so corroded, that, before it could be properly inspected, it would be necessary to work a few days; this part of the mine I consider worthy of our attention. Gill shaft is now timbered, cased, and divided to the 30 fm. level, and the footway completed. To-morrow, or Friday, the plats will be finished; the following day, or Monday, we shall commence hauling and clearing the 20 and 30 fm. levels. I have not yet let the tribute pitches, as I thought it advisable to stop before the shafts are put in order to draw the stuff. Next week, I hope to give you more satisfaction as to the state of things at Gill and Rundle shafts; underground, everything of timber kind in the shafts was so decayed, that I was obliged to put all new. Once done, it will last for many years; this is nearly completed, and shortly our operations will be confined to exploring the lode. Rundle shaft is nearly completed; it is all new timbered, and a good firm shaft to the 40 fm. level. You shall hear from me again in a few days. I am not in a position to fix the time the mine will be in a state to be inspected, before I have had some attle cleared.

WHEAL GOLDEN CONSOLS.—At the engine-shaft, in the 70 fm. level, north of the cross-cut, the ground is good; the lode has improved both in quality and size since last reported on. In the 70 fm. level south-west the ground is improved, with more ore. At Thomas's shaft, sinking under the 60 fathom level, the lode is larger and better for ore, with good ground. In Rickless's winze, sinking under the 60 fm. level, the ground is improved; the lode is small at present, with indications of improvement; Bellhouse's winze, sinking under the 60 fm. level, is communicated with the rise in the back of the 70 fm. level, which has given us sufficient ore to stope the back north and south, which we are doing, in order to raise as much ore as possible. We have met with a lode, 8 in. big, in sinking this winze, about 6 fms. under the 60 fm. level; it is underlaying about 3 ft. per fm., and very good for ore. This is what made the lode so productive in the 70 fm. level, and it appears at present that it has not been seen in any of the upper levels; it will take a cross-cut 3 fms. to cut it in the 60 fm. level, according to its present underlay. After we have opened on it a little further, you shall be informed of the result.

WHEAL RUSSELL.—The cross-cut in the 26 fm. level, on the north lode, is still in hard capels, with mundic and spots of copper ore. The men are getting on well with the sinking of the south engine-shaft; it is now down below the 26 fm. level between 7 and 8 fms. We have not completed the clearing of the 16 fm. level east, the run being greater than was calculated on. In the sump-winze, below the 26 fm. level, the men have been employed the last three days in taking down the south side of the winze against the slide, where they have broken some good stones of copper ore from the slide, which looks well for the lode on the opposite side. The pitch in the back of the 26 fm. level is just the same as when last reported on.

WHEAL VINCENT.—We have discovered the junction of the south and middle lode, and are now sinking a shaft on them. We are also getting on with the cross-cutting on both the lodes to the east of the engine-shaft on the hill in whole ground; these lodes are looking well on the backs. Both the stamps are working day and night

FOREIGN MINES.

COPIAPO MINES.—Mining report for March, dated Copiapo April 27:—

COPPER MINES—CHECO.—In the 30 fm. level, east of Harman's shaft, the lode is still large—say 3 ft. wide, and producing excellent ore. The 20 fm. level, east of Harman's shaft, is looking pretty well; the lode is 15 in. wide, with ore of superior quality. In the winze sinking below the 30 fm. level, to the west of the shaft, we have a kindly lode, and it is producing ore of first-class quality. The stopes in the back of both the 20 and 30 fm. levels still continue to produce ore of good quality. Viewing the whole of our operations here, I think they are looking much the same as for some months past.

SAN PEDRO.—In the 12 fm. level west the lode is still large, 3 ft. wide, but it will not give so much ore per fm. as when last reported on, being mixed up with quartz; with this composition, however, I am not at all displeased, for the lode is sure to make rich again in a little time; in fact, it is giving some good ore now. In the 12 fm. level north, for the present, we have suspended operations, and have put the men to stope the bottom of the level, where the lode is producing a fair quantity of very good ore. In driving the adit level on the manto, towards the south lode, the ground is rather hard, still the manto is large, 2 ft. wide, and is producing fine stones of ore; this I consider to be a first-rate speculation.

LA COMPANIA.—During the present month we have confined our operations to the sinking of the shaft on the south lode, with the sinking of a chiffou, or winze, on the same. In the shaft the lode is 3 ft. wide, and giving ore of superior quality, yet it is not so concentrated as we could wish, and as we believe it will be in depth.

LA REYNA.—Here, during the present, we have continued our sinking in the different shafts. In No. 1 the lode has been disordered by a manto passing through it, but is now again forming itself, and giving some good ore. In No. 2 shaft the lode is from 2 to 3 ft. wide, and of a beautiful character, and producing ore of very superior quality. In No. 3 shaft we have at present a large lode, 2 ft. of which is very rich ore; with this shaft, as well as the others, I am not a little pleased, having just now got through a large bed of gossan.—Produce for March—Checo ..... 34 tons.

,,	,,	San Pedro	20 ,,
,,	,,	La Compania	10 ,,
,,	,,	La Reyna	10 ,,
		Total	74 ,,

The *Cubo*, 500 tons, arrived at Copiapo on the 12th April, to load a cargo of copper ore, and would be dispatched as soon as possible.

Tres Puntas, April 20.—*The New Road.*—Agreeably with your request, I accompanied Mr. Grellet to the port of Flaminco, and now beg to hand you my report on the same:—I consider the distance from here to the port to be about 24 leagues, over a pretty even plain. This can be made an excellent road by cleaning it in places—say, for about one-third of the whole distance, or 8 leagues, and which may be effected for comparatively little expense, when the length of the road is considered. I think $2000 would complete it. The port, or bay, of Flaminco is beautifully situated, and is well sheltered from the prevailing winds of the coast. It has also, as I have been informed, excellent anchorage, with good holding ground; in fact, it is the best natural port that I have ever seen. And now I would say something as regards the mines, which are from 6 to 7 leagues from the port, on the direct road to Tres Puntas. They have formerly been worked, but not to any considerable extent; several shafts, or pits, have been sunk a few fathoms, from the whole of which ores have been broken, and are now lying at the surface in large piles—I think, including both mines, over 150 tons. These are, however, in their present state, not good enough for shipment, and will, therefore, have to be repicked before they can be shipped. Who these ores belong to I cannot tell—probably the former owners of the mines, who will no doubt dispose of them to you on reasonable terms. I will now speak more particularly of the prospects of these mines. The lode is large, varying from 3 to 18 feet wide, with scarcely any underlay, and composed of copper gossan, with a large proportion of green copper ore—samples of which I have sent you, and per centage you know, no doubt, before this. Now, looking at a lode of the above description, embedded in a beautiful stratum of elvan, and with granite adjoining, I think cannot fail of becoming a grand and profitable undertaking, and more particularly so, from its proximity to the port, at which place a smelting establishment may be erected, and the low quality ore be reduced to a good per centage, for you must suppose that, from such a large lode as the above, there will be a great quantity not fit for shipment in its present state. I would further observe, that there is an excellent watering place, giving a full supply of water, both for the mines and the troop, within 1½ leagues of the mines, and wood for fuel to be had in abundance, with pasture for the animals for some part of the year; other watering places on the road may be made for a trifling expense. In conclusion, allow me to say, that this is an undertaking that should not for a moment be lost sight of.

SILVER MINES.—AL FIN HALLADA.—Our prospects here, I am happy to inform you, are very good; I think the mine has never looked so well as at the present moment. During the past month we have taken down the lode, which has given about 30 cajons, or 90 tons of ore, of, I think, about 200 marcs per cajon (about 120*l*. per ton). I will now give you the present state of the different lodes—viz.: In the 5 fm. level south the lode is 1 ft. wide, and giving ore of 100 marcs per cajon. In the 15 fm. level the lode continues to give ore of fair quality. In the 20 fm. level the lode is large, 2½ ft. wide; this end has a beautiful appearance, and has considerably improved since my last—it is now yielding ore of from 250 to 300 marcs per cajon. In the pique, or winze, below this level the lode looks well; now, when you look at this, a lode 2½ ft. wide, giving an average quality ores over 300 marcs per cajon, and this in the bottom levels, I need not, I think, use very strong argument to prove to your satisfaction that the mine never looked so well; and more especially when I say that the lode to the north still holds good. My anticipations of this mine are very high, as well as the mineral generally, for this mine is the key to all the rest, being the deepest, and having the same strata of ground.

SAN JOSE DEL CARMEN.—In this mine we have no alteration, the work being confined to two lodes; however, my opinion is not altered regarding this, I may say, most extraordinary mine, and it only requires time and perseverance to bring out its resources.

MERCEDITES.—I notified to you in my last that we had commenced a new shaft; this is now sunk about 5 fms., in which the lode is 1 ft. wide, and giving beautiful plomos; such a pretty lode I have seldom, if ever seen; we are saving the whole of the lode, and I expect it will give a fair ley, a stone of which I have sent you to be assayed. In the 25 fm. level, driving towards the shaft, the lode is 1 ft. wide, and has the same appearance as the lode in the shaft. In each of the labores the lode is producing a little silver, but not enough to pay for returning, with the present heavy rates of freight; we are, however, daily expecting it to be better, and I think we have a good foundation for these hopes, as it is a large lode, continually giving silver, with a beautiful channel of ground, and over this several of cross branches, which must ultimately fall in with the main lode.

CARMEN ALTO AND PLOMIZA.—In this mine we are still driving our cross-cut both east and west, but are not progressing as fast as we could wish, owing to the hardness of the ground. In the chiffon, which is down 6 fms., the lode is small; our object, however, is to get down, when we hope to find something good.

SANTA ANA.—This mine still holds out fair prospects, and in the present month the lode has improved, both in size and appearance in each of the labores; and I again say nothing is wanting but a cross branch to give us a rich mine.

COLORADA.—We have nothing new here to report upon. The lode in the 20 fm. level north still continues to yield a little silver, mixed with lead. We are still sinking in the chiffon in a southerly direction, where the lode is 3 ft. wide, with a beautiful soft stratum of ground; on the east and west lode we are also sinking, the lode being 2 ft. wide—our expectations are high about the intersection of these two champion lodes.

GOLD MINES.—DESCUBRIDORA DE ORA.—During the past month we have confined our operations to the sinking in the bottom of the mine, and the driving of the 10 fm. level. In each of these places we have had a large kindly lode; and, although giving a little gold, yet will not pay to carry to the city for amalgamation; however, we hope in the ensuing month to get something better.

SEGUNDA ESPERANZA.—In the present month we have continued our sinking on the silver lode, and although it maintains its size, and is composed of beautiful quartz and clay, yet is poor. On the gold lode we have done very little, owing to one of our English men being sick.

SANTO DOMINGO.—Here we have a lode 1 foot wide, composed of iron, gossan, and quartz, and a more kindly lode for gold I have seldom seen; we are both driving and sinking, and in each labor the lode has the same appearance.

In conclusion, allow me to call your attention to two or three things as regards this, I think, important mineral. First, to the Al-Fin Hallada, where in the 20 fm. level the lode is not only large but rich, and, as I have before observed, this mine is the key to the mineral, for it is the deepest;—now, this to a stranger would appear from my report to be a paradox, from my saying the 20 fm. level is the deepest, when I have stated that we are driving a 25 fm. level in the Mercedita. I would, however, to put this right, say that the Al Fin Hallada is on a plain, and that the Mercedita is on a hill, at least 500 ft. above. In the second place, as regards the Mercedita, in the shaft, as has been already observed, the lode is producing silver: now, look at this, with the prospect of the intersection which we are sure to have. I feel no hesitation in saying as a miner, that I have seldom or ever seen such indications fail.

IMPERIAL BRAZILIAN MINING ASSOCIATION.

Bananal, April 3.—The Captains Tregoning shall have every support and assistance from me to carry out their plans: they do not intend taking advantage of the open cutting, but have commenced their tunnel. I am sorry to say that our different works have been considerably impeded by the Easter holidays; and, in fact, when they will end I do not know. All the Brazilians left on Thursday evening, and not one of them has yet returned to work. This is provoking, but we have no remedy against such an inconvenience. The Bananal Mine, I am sorry to say, although now and then giving promising samples, is not at this moment very productive. We continue to prosecute the different points mentioned in the captains' report, but, with the exception of the ground below the 14 fm. level, on the principal veins, very little can be expected, as the backs about that level, and about Gibson's shaft are nearly exhausted. Our driving north of Goldsmid's is tolerably rapid, and I still hope that something will be met with in this large tract of virgin ground. I have often mentioned to you, that our great and principal object is to get down to the 24 fm. level, so as to make backs; and I beg to assure you, that every means that can possibly facilitate this work has been used, and is still using, to gain this point. I have contracted for the thorough repair of Walker's wheel for 300 milreis—that is, to put all new arms, rings, backing, and buckets—to be commenced as soon as Goldsmid's stamps is completed and put to work. These repairs will probably take about six weeks from this date. We shall then have 63 stamp heads in excellent working condition—viz.: Great Western, 25; Goldsmid's, 20; Walker's, 18; which, together with 15 the contractors intend putting up, will make 78 heads ready to work at the expiration of the four months allowed for their preparatory works. The Captains Tregoning have not been able to keep the stamps at Gongo fully at work, but intend doing so in future, by employing a greater number of free labourers.

P.S. Since writing the foregoing, between two and three boxes of work for the washing house have been obtained from the new stopes in the back of the 14 fm. level, east of Gibson's, which yielded 1 lb. 0 oz. 15 dwts.

Gold report.—Gongo, from 23*d* March to 3*d* April	*Lbs.*	2	5	4	0		
Bananal ditto ditto		2	1	8	0	4 6 12	0
Total from 1st Jan.—Gongo	*Lbs.*	38	6	0	0		
Bananal		55	9	15	0	94 3 15	0

LINARES MINES.—The following has been received from Mr. H. Thomas:

Linares, June 22.—I wrote you last on the 15th inst., which I beg to confirm. Wilson's shaft, sinking under the 31 fm. level, is in hard ground, and the lode at present unproductive. Shaw's shaft is holed to the 31, and, when, properly squared, the men will be employed to cut a plat, preparatory to driving this level eastward, and sinking to the next level. We have contracted with our carpenter to build the whim, and hope to have it up in three weeks. This shaft has communicated with the level 3 fms. behind the present end. We have put four men to drive a cross-cut from the 31 fm. level north, in order to hole San Juan shaft, which, you are aware, is not at present sinking on the lode. Our tribute pitches continue productive, and we have now several piles of excellent ore from the tributers on the floors, preparing for dispatch to Seville, or elsewhere.

Stock of Ore Dressed.

June 15.—To stock, as per account furnished	*Tons*	34
,, 22.—Weighed in this week		12— 46
Ore at Seville for shipment		116
Total		162

NATIONAL BRAZILIAN MINING ASSOCIATION.

Cocaes Mine, April 2.—On the 26th of March a party of negroes were removed from Hartley's western stope to excavate on the layers northerly from Hamilton's upper one, as advised in the last report, from which point a larger quantity of ore than usual has been obtained; but the intervention of the Easter holidays has made a considerable difference in the quantity of work performed, to that which otherwise would have been done.

Culaba produce, from 19th to 27th March	*Mks.*	2	0	6 18
Cocaes ,, from 24th March to 4th April		4	0	0 17
Total	*Mks.*	6	0	6 35

CALLINGTON MINES COMPANY.

The quarterly general meeting of proprietors was held at the offices, Salvador House, Bishopsgate-street, on Wednesday last, the 3d inst.

RICHARD HODGSON, Esq., in the chair.

The usual preliminaries having been gone through, the CHAIRMAN read the following

DIRECTORS' REPORT.

The directors met you here so recently, and then explained to you so fully their views, and the works in course of prosecution, that they have nothing important now to communicate, further than will appear in the agent's report, which is now before you. From this report, it will be found that the lead mine is now paying its way, and that the prospect of improvement is good. On Kelly Bray, a small expenditure is going on; and your directors are not without hope that this will ultimately be re-paid. The accounts (a copy of which has been sent to each shareholder) are also on the table for your approval and confirmation.

The following report, from Capt. Nancarrow, the agent, was also read:—

June 28.—The 125 fathom level cross-cut has been driven in the last three months 2 fms. 0 ft. 6 in., the lode cut and 4 fms. 4 ft. 5 in. driven north, the lode being about 8 in. wide, with occasional stones of silver-lead ore; also 3 fms. 5 ft. 2 in. have been driven south, the lode being about 9 in. wide—this end has been producing from 2 to 3 cwts. of silver-lead ore per fathom. The 112 fm. level north has been driven 4 fms. 4 ft.; but, owing to the increase of water met with, we have been obliged to suspend this level until we shall have fixed a new plunger at the bottom of the downright shaft, then the driving of this level will be resumed again; the 112 fm. level south has been driven 6 fms. 4 ft.; this level also has been stopped the last month from a want of a proper ventilation, and the men put to sink a winze from the level above; this winze is down 5 fms. 1 ft., the lode is large, yielding work of coarse quality. The diagonal shaft has been sunk 11 fms. 5 feet, now complete to the 112 fm. level; the men are now engaged preparing to sink below. At the south mine, the 112 fm. level north has been driven 13 fms. 1 ft. 11 in., opening ground of a high tribute character; the winze sinking below the 112 fm. level has been sunk 1 fm. 5 ft., the lode in which has a very promising appearance, opening good tribute ground. At Kelly Bray we have again resumed sinking the engine-shaft, cased and divided it from the 30 to the 40 fm. level, cut plat, fixed penthouse, &c., and sunk the shaft about 3½ fms. below the latter level, the lode at the present time being much disordered, it being split in two parts; we are carrying the shaft on its regular underlay, and calculate after a few fathoms more sinking to meet with the main part of the lode again. The 70 fm. level east has been driven 2 fms. 5 ft. 6 in., but is suspended, there not being sufficient air for the men to work; after the above-named shaft shall be communicated with this level, we shall then resume the driving of it again: total number of fathoms driven and sunk in the past three months, 57 fms. 4 ft. 8 in. In conclusion, I would beg to remark that it will take us about four months from the present time to sink the diagonal shaft to the 125 fm. level, as the ground is not so favourable for sinking as above. We are in daily expectation of an improvement in the 125 fm. level south, both in the lode, and also in the ground, judging from the level above. We calculate after another month to communicate the 100 winze on the 112 fm. level south; when this is done we shall be able to resume driving the level, and also to set some pitches in the back at a moderate tribute. We intend also, after another month, to recommence driving the 70 fm. level south, at the south mine; the back of this level, for near 20 fms. north, has proved very good, quite beyond our expectations. We are sinking Kelly Bray engine-shaft with all possible speed by nine men, at 14*l*. per fm. We sampled on the 20th of the present month—May ores, computed 45 tons; this parcel of ores will be tendered for in London, on Wednesday next, the 3d July.

From the statement of accounts, it appeared the balance from last account was 2483*l*. 18s. 10d.; cost for Jan., 821*l*. 6s. 2d.; ditto Feb., 830*l*. 17s. 2d.; ditto March, 852*l*. 18s. 9d.; interest and discount, 27*l*. 18s. 9d.; directors' attendances, 62*l*. 10s.; London management, 50*l*.; auditors, 21*l*.=5150*l*. 9s. 8d. —By silver-lead ores, sold Jan., 783*l*. 9s. 7d.; Feb. ditto, 807*l*. 10s.; March ditto, 834*l*. 19s. 4d.; difference on sale of forfeited shares, 10*l*. 2s. 6d.: leaving balance against the company of 2714*l*. 8s. 3d., from which is to be deducted March subsist, 23*l*., and a balance in favour of the Kelly Bray department of 297*l*. 5s. 6d.—After some conversation, the subject having been introduced by Mr. John Field, it was resolved, in future, that the Kelly Bray department should not be kept separate, but that the accounts should merge into those of the Callington Mines.—The report and accounts were then adopted; and a vote of thanks having been passed to the chairman and directors, the meeting separated.

LEWIS MINING COMPANY.

The annual general meeting of shareholders was held at the offices, Salvador-house, Bishopsgate-street, on Wednesday, the 3d inst.

RICHARD HODGSON, Esq., in the chair.

After the usual preliminaries, the CHAIRMAN read the following

DIRECTORS' REPORT.

The present meeting enables the directors to present to your notice a much more satisfactory account of the prospects of this undertaking than it has hitherto been in their power to lay before the proprietors, and enables them pretty confidently to predict a speedy realisation of their original hopes and expectations—namely, dividends, which, in a few months, it is anticipated the success of the mine will enable the directors to commence paying. The accounts for the past year will be submitted; it may be useful for you to know that the cost for the current year has been 13,516*l*. 15s.; the ores sold realised 14,923*l*. 13s. 11d.—leaving a balance in favour of the mine of 1406*l*. 18s. 11d. At the annual general meeting, held on the 4th July last year, the accounts showed a balance of 2235*l*. 8s. 9d. against the mine: the directors then felt assurance that this balance would be greatly diminished in the then current year. At the request of several influential shareholders, they refrained from making calls to liquidate it, and they trust you will approve of the course taken. The last year's balance of 2235*l*. 8s. 9d. has thus been reduced to 828*l*. 9s. 10d.; you will bear in mind that this balance is to the end of the month of April, and your directors have no hesitation in saying that the profits for May will be at least 400*l*., so that the debtor balance will be, on the sale of the ores, half diminished, and they believe wholly so, when the accounts are made up to the end of the last month—June. The directors feel the more gratification in stating this, as, on reference, it will be seen that for the first six months of the past year little or no profit was made; therefore, the last six months have shown good results, notwithstanding the price of tin has not been good. Over and above the results thus detailed, the directors may state that there are some 25 or 30 tons of tin ore broken and at surface, which is legitimately due to the past year, and not brought to account; which tin is so situated as to preclude its being brought to stamps at present. These ores may be fairly estimated at 1350*l*., over and above all that has been stated to you.

Statement of Accounts for Twelve Months, ending with April Cost, 1850.

Balance from last account	£ 2,235	8	9
Working cost of mine	13,028	15	0
London office expenses, interest and discount, &c.	488	0	0
Total	£15,752	3	9
Amount of tin returns, for 12 months	£14,813	0	0
Ditto arsenic and copper ore	110	13	11
Balance	828	9	10
Total	£15,752	3	9

The following report, from Capt. M. Reed (the agent), was also read:—

June 28.—In complying with your request, I beg first to give you a statement of what has been done in these mines in the past year from the 1st of May, 1849, to the end of April, 1850. The engine-shaft has been sunk 10 fms. to the 80, and a cross-cut driven south, to intersect the south lode in that level. On the several lodes we have driven 448 fms., sunk and rose 105 fms., and cross-cuts 141 fms. In February last we made a good discovery, by cross-cutting north in the 70, which level, to the present, stands most prominent. By cross-cutting south in the 50 fm. level, in copper ore shaft, we have intersected a new lode, which is opening good tribute ground. We have since driven south from copper ore shaft in the 20 fm. level, and cut the same lode 1 ft. wide—good work for tin. We are now cross-cutting in the several other levels from copper ore shaft, in order to have this lode in full operation. When looking at the position of our sett, the eastern ground looks very encouraging; and in order to explore the same, we are driving the 30 fm. level east from Praed's shaft on the north lode, and cross-cutting south, to intersect other lodes known to be there. We beg you will allow us to carry out the operations above stated, for the further extension of the mine. Since the commencement of this year the costs have been augmented by additional machinery, the laying out of the dressing-floors, and the more extensive working of the mine. I trust you are satisfied that having the necessary machinery to enable us to carry out the operations of the mine has been to your advantage, and which can be seen by our additional returns; and let it suffice me to say our prospects at present are such as will support our present samplings, and yield to the adventurers fair returns. We have employed in the mine on tut-work 108 men; on tribute, 100; and at surface men, women, and children, 224—making the aggregate number 432. Had I been here the whole year, I might have been able to give you a more minute detail of what has been done—that of the discoveries. We shall sample 35 tons of tin at the usual time.

The CHAIRMAN congratulated the meeting on the improved prospects of the undertaking. In May, 1849, their sales of tin were 900*l*., and for the past three months they had averaged 1600*l*. per month; the mine might now be said to be free, and he had no doubt immediate and continuous dividends would be made.

Some conversation ensued as to the best mode of disposing of the produce, whether by contract with the Union Tin Smelting Company, or by ticketing among the smelters.

Mr. MACKAY inquired if the reserves of ore in sight were such as to hold out promise of a continuance of present returns?—Mr. STAINSBY replied that they certainly were, and fresh lodes and branches had been cut recently of the most promising character. He had no doubt it would turn out a valuable property.

The reports and accounts were then adopted, and a vote of thanks having been passed to the chairman and directors, the meeting separated.

EAST TRESCOLL TIN MINING COMPANY.

The first general meeting of shareholders was held at the Flintshire Mining Offices, King-street, St. James's, on Wednesday, the 3d inst.,

THOMAS HEATHCOCK, Esq., in the chair.

The SECRETARY having read the notice convening the meeting, said he was happy to state that a far greater number of shares had been signed for than could have been expected, considering the short notice which had been given to the public; had the meeting been deferred another week, every one, or even double the number, might have been applied for. Many of his friends were in the country, and would not be in town for another week, but he should subscribe for 400 shares for them in their absence, which would make 686 shares.

A gentleman present inquired what time would be allowed for the payment of the proposed call?—On being informed that two months was usual, immediately agreed to take the 314 remaining shares, and offered, if the secretary had no objection, to sign the cost-book for the 714, which would close the list.

This proposition being acceded to, the cost-book was signed, and the entire shares taken up.

Mr. Brand was appointed purser, and instructed to give immediate orders for the purchase of an engine, pumps, stamps, and other necessary machinery and materials, and to have the engine-shaft put down to the 20 fm. level with all due speed.—Three of the proprietors then present were nominated the first committee of management.

A call of 10s. per share was made, payable within two months.

Some fine specimens of tin from two of the lodes were laid on the table; they were of the richest quality, and equal to grain tin.

Reports of the mine were read, of which the following, in a condensed form, shows the contents of the whole:—

That about nine years ago a working miner sunk a shaft on a tin lode, by the assistance of a small water-wheel; and at 9 fms. from the surface got under the old workings, and raised a splendid pile of tin-stuff, which was stamped out and sold; it is said to have realised the highest price in the county; by some very imprudent act, the proprietor let the water get into the shaft, and there remain for nearly a month, while he was away: on his return he found his shaft run together, burying his pumps, tools, and timber; and being unable to get more, he abandoned the works. In 1848 the Wheal Trescoll Mine, which is the hill of which East Trescoll is the valley, was commenced, and in the course of six months they opened on no less than 20 lodes, and one of them, called the B lode, was very rich and productive; they erected a 50-inch cylinder pumping engine, and have sunk their mine 30 fms.; the B lode is at this depth more productive than ever, and, consequently, they are now making very large profits. All those lodes are in East Trescoll sett, and the East Trescoll engine-shaft, and Wheal Trescoll flat-rod shaft, are sinking within a short distance of each other, and the rich deposit of tin now being worked on is close to the boundary of the setts; consequently the East Trescoll Company, having their lodes already proved for them, can commence raising tin immediately. They have also the advantage of working some of their lodes quite dry—the adjoining mine being at a lower level takes away the water. A proposition is about being made to the Wheal Trescoll Company, to rent from them a part of the power of their large engine; should this be effected, it would be a mutual advantage to both companies, as Wheal Trescoll must now drain part of the other mine, whether they get paid for it or not; but if East Trescoll paid a fair proportion, they could effectually drain it. East Trescoll would only then require a small engine for stamping, which would be a saving to them of an immediate outlay of 850*l*. There is fall enough in the sett for erecting three water-wheels, which will drive 6 heads each, which, with a 24-head steam-stamps, will turn out a large quantity of tin. Within the past two months another very fine lode has been cut in the river, from which a sample of tin has been sold, and found very good. That there is an immense deposit of tin in the sett not a doubt remains; that it is of a very productive kind is also evident, as it produces, on an average, 7 cwts. of black tin to the 160 sacks of work. A very small capital only will be required to prove the mine down to the 40 fm. level; 2000*l*. will be quite sufficient. It was estimated they could get tin into the market within three months, but not in sufficient quantities to warrant a profit; yet it was considered by the agents that it would be done within the year.

WHEAL CALSTOCK MINING COMPANY.

At the half-yearly general meeting, held at the mine, on 27th June, the accounts were examined and passed, showing—Calls, 3255*l*.; ores sold, 85*l*. 4s. 8d.; loan from Naval Bank, 340*l*.=3680*l*. 4s. 8d.—By labour cost and materials to 30th of Nov., 1849, 2793*l*. 0s. 6d.; ditto Dec., 64*l*. 7s. 6d.; ditto Jan., 1850, 44*l*. 17s. 2d.; ditto Feb., 37*l*. 15s. 3d.; ditto March, 53*l*. 1s. 3d.; ditto April, 150*l*. 11s. 2d.: leaving balance in favour of 536*l*. 11s. 10d. (less calls due, 517*l*. 7s. 4d.), shows in hand, 19*l*. 4s. 4d.—From the statement of assets and liabilities, it appears the debts to various merchants amounted to 1108*l*. 16s. 7d.; the above balance calls due, 517*l*. 7s. 6d.; and due from Okel Tor Mine, 20*l*.: leaves balance against the mine, 547*l*. 4s. 9d.—The purser was directed to apply to all defaulters, giving them a month's notice to pay their calls; and, unless settled, their names to be given to merchants to sue them thereon.—The adventurers possessing four different setts, it was resolved, that they should hereafter be called Calstock Consols, and divided into 512 shares, each adventurer holding two shares for one formerly held; that 71 unappropriated shares

be offered for sale to the adventurers to purchase by tenders, to be opened at a meeting to be held on 11th inst., at which meeting a proposition for raising fresh capital, by a further issue of shares, will be considered, as also the propriety of clearing up the 63 fm. engine-shaft, and driving a cross-cut at that level to cut the lodes now working on, and extend the present levels into the Duchy ground east and west.—A call of 25s. per share was made payable in a month.—The following report, from W. H. Collom (the purser), was read:—

June 27.—In presenting you with the report of this mine since the last meeting, the deep or 50 fm. adit level has been driven on the course of the lode east 25 fms. The character of the lode, for the last 50 fms., has presented much the same appearance, being large, and containing a quantity of mundic, with black and yellow copper ore. The Ward lead lode has not been reached in this level. In the cross-cut south, the lode driven on in the deep adit has been intersected 12 fms. under the adit, and is found to be 5 feet wide, with good stones of ore in it, and mundic. To the south of this lode is a lode with a north underlie, which will, according to the present underlay of the two lodes, unite with the first-named lode at a depth of about 40 fms. from surface, or 23 fms. below the present workings; to reach their point of junction is a matter of great importance, and I fully expect to meet with a productive lode, and that the mundic seen in the shallower levels will at that depth give place to copper ore. Between these two lodes is a middle one, which will also unite with the main lode. Besides sinking the engine-shaft, and continuing the 12 fm. level east, I should also recommend driving the deep adit east, which level will be serviceable for ventilating the mine, besides making discoveries by driving on the lode, and particularly cutting the Ward lead lode. As a sale can be obtained for any quantity of the mundic ore, we have picked out 180 tons, which are ready for shipment, and have been sold to the Patent Alkali Company, and we have many hundred tons of these ores already raised. In conclusion, I beg to state it is my unaltered opinion that these mines will yield large quantities of ore, and will amply repay the shareholders, if the workings are properly carried out. All the pitwork and machinery on the mine is in excellent working order.

FOWEY CONSOLS MINING COMPANY.

At a general meeting of adventurers, held at the mine on 18th June, the accounts were examined and passed, showing—Copper ores sold, 13,943*l.* 13s. 7d.; sundries, 28*l.* 16s. 7d.=13,972*l.* 10s. 2d.—By labour cost and merchants' bills for Jan., 3080*l.* 15s. 4d.; ditto Feb., 3152*l.* 11s. 1d.; ditto March, 3208*l.* 15s. 4d.; ditto April, 3288*l.* 2s. 5d.: leaving profit, 1242*l.* 6s.; to which add balance in hand, 6496*l.* 2s.=7738*l.* 6s. 2d.; from which deduct dividend, 30s. per share (741*l.*), leaves to next account, 6997*l.* 6s. 2d.—Resolutions were unanimously passed to the effect, that the mine having become so deep and hot as to be highly injurious to the constitutions of the miners to have to climb up by ladders, it was considered imperative that they should be drawn up after their day's work was finished; and as Pedlar's shaft could be made available for a man engine to a depth of 280 fms. from surface, it was determined, for the sake of humanity, to erect such a machine, at a cost of 2160*l.*, provided the lords generally will allow out of their future dues 5 per cent. per annum on 2000*l.* towards the outlay. This is the more liberal, as, during the past five years, only 2*l.* per share dividend has been declared; while the outlay has amounted to 204,813*l.* 16s. 1d.; and the several lords have been paid 8125*l.* 16s. 9d. We should hope to this exceedingly moderate request, which is most important to their own, as well as every interest, there will not be a dissentient.

LLWYNMALEES MINING COMPANY.

At the two-monthly meeting of adventurers, held at the offices, on Tuesday, the 2d inst., the accounts were submitted, showing—after payment of all liabilities, including May cost, engine, engine-house, &c.—a balance in favour of the mine of 400*l.* The boiler at last having arrived, Mr. Green, the engineer, has promised to have the engine at work in three weeks; the water being now up to the 8 fm. level; and on account of the drought, the wheel having ceased working, unless favoured with heavy rain, the mine will not be in working condition till after the engine is up. A new crusher was ordered, the present one not being of sufficient power.

SOUTH WHEAL FRANCES MINING COMPANY.

The usual two-monthly meeting of adventurers was held on the 1st instant, when a statement of accounts was presented, showing—Balance in hand to the end of March, 1190*l.* 1s. 2d.; ore sold, April 4, 1829*l.* 7s. 2d.; ditto, May 2, 1497*l.* 16s. 7d.; tin ore, May 29, 710*l.* 17s. 8d.; property tax on dues, 7*l.* 17s. 5d.=4045*l.* 18s. 5d.—Labour cost for April and May, 1296*l.* 10s.; merchants' bills, 636*l.* 5s. 4d.; dues, rates, &c., 319*l.* 11s. 8d.—showing ba'ance of profit, 1793*l.* 11s. 5d.—The accounts having been examined were passed, and a dividend of 15*l.* per share declared.

WHEAL BLENCOWE MINING COMPANY.

At a general meeting of shareholders, held at the mine, on Thursday, 27th June, the statement of accounts was presented, showing—Balance due to purser, at last meeting, 137*l.* 0s. 11d.; mine cost for Feb., 57*l.* 13s. 2d.; March, 27*l.* 6s. 3d.; April, 24*l.* 9s. 3d.; merchants' and other bills, 29*l.* 13s. 10d.=276*l.* 3s. 5d.—By sale of tin (less dues), 80*l.* 7s. 5d.; call made, 3d March, 110*l.*: leaving balance now due to purser, 85*l.* 16s.—The accounts were passed, and a call of 10s. per share made.

The following report, from Capt. John Dale, was read to the meeting:—

Since the last meeting, our operations have been almost wholly confined to the driving of the 20 fm. level, to cut the east and west lode; but our progress has been much retarded in consequence of a hard channel of ground which we had to pass through. I am now, however, enabled to add that the ground is much more favourable; and, if what we have still to drive through is equally favourable, we hope to intersect the most southerly of the east and west lodes in about six weeks. We have the north and south lode in the 20 fm. level; and find its value there to be about what it has hitherto averaged, which considerably strengthens our hope with respect to the east and west lodes.

MINING COMPANY OF IRELAND.

The usual half-yearly meeting of proprietors took place at the offices, in Dublin, on Thursday last. The report of the directors presented congratulated the proprietary upon the improved prosperity of the company, as shown in the particulars given of each mine. The report thus concluded:—"Your board would express its hope and expectation that the improvement in your affairs, noticed for some time past, will prove continuous, and lead to an early return of the prosperity which admitted of the large dividends heretofore realised by the company."—The report was adopted.—[We shall give the report in detail in our next Number.]

CARN BREA MINES (near Redruth).—Divided into 1000 shares, upon which 15*l.* each was called, making the total outlay 15,000*l.* From 1834 to 1849 inclusive, a period of sixteen years, the large sum of 187,500*l.* has been paid in dividends to the adventurers, being about 1250 per cent. upon the sum invested, besides the cost of the permanent plant, which is of great value. These mines are still very productive, the sales of ore in the past quarter having amounted to 2380 tons, which realised 14,055*l.* 17s. 6d.

WEST CARADON COPPER MINE (St. Cleer, near Liskeard).—In 256 shares, 20*l.* paid up. Conducted on the Cost-book Principle. West Caradon is in extent 370 fms. on the course of the lodes, and about 420 fms. north and south, and consists of two setts, called Downhill and Menadue; held on leases for 21 years from 1840, at 1-15 dues; the lords being Mrs. Fooks and Mr. F. Hendra. The mine commenced working in 1840, and first made returns in 1841; from which period to the end of October, 1848, the ores sold realised 167,210*l.* 9s. 2d.; the outlay during the same period was 137,828*l.* 7s. 11d.—viz., 89,025*l.* 10s. 2d. for labour, 48,802*l.* 17s. 9d. for materials, leaving a profit of 33,344*l.* to be divided amongst the shareholders. In 1849 the profits paid to the shareholders amounted to 3840*l.*, and to the end of June this year 1920*l.* West Caradon, was the second mine opened in the Caradon district; South Caradon, to the east of it, having been discovered a few months previous. The two mines are situate on the extreme edges of two hills, a deep valley running between them, and on South Caradon proving remarkably rich; the sett of West Caradon was obtained by other parties for a trifling sum, and has realised to them the large profits enumerated above. The mine is nearly 200 fms. deep, has eight lodes, employs 500 persons, and the machinery consists of four steam-engines.

BISHOPSTONE MINES (near Swansea).—The first sampling at this mine took place on Tuesday. Nearly 40 tons of rich lead ore, containing silver, will be immediately offered for sale, and it is expected will realise a good price.

SOUTH PLAIN WOOD.—A change of local management has recently taken place here, in the person of an agent from Wheal Seton Mine, who has had considerable experience, and his opinion of the mine is considered more favourable than his predecessor's.

WHEAL TREFUSIS.—It is expected that the engine will be put to work here on Saturday morning,—and the lowest levels being but 15 fms. from surface, the water is expected to be in fork by Monday evening.

MINING APPOINTMENTS DURING JULY.

6. Pay-day at Par Consols, West Jewel, Dolcoath, Stray Park, and Devon Consols.
8. North Roskear account on the mine. Par Consols sampling.
10. Consols, United, and other mines sampling.
11. Ticketing at Redruth; Camborne and other mines.
12. North Pool setting. Pay at West Caradon and Gonamena.
13. Pay at Par Consols.
15. Fowey Consols sampling.
17. North Pool and other mines sampling. Great Consols account on the mine.
18. Ticketing at Truro; Devon Consols and other mines.
19. United Mines account on the mine. Badnick pay. Levant tutwork pay.
20. Setting and pay at Fowey Consols. Pay at Wheal Seton, Treviskey, Great Consols, United, West Buller, Comfort, Agar.
22. Treviskey and Barrier account. Par Consols sampling.
23. East Crofty account on the mine.
24. Carn Brea and other mines sampling.
25. Ticketing at Truro; Consols, United, and other mines.
26. North Pool pay. East Crofty setting.

HULL, JULY 4.—The railway share market has been less buoyant, and prices in most instances have given way. For the present, however, the decline seems stayed, and we look for an improvement rather than otherwise in speculative stocks; but buyers for investment seem inclined to wait the result of the meetings now near at hand. English mining shares continue in limited request.

THE SCOTCH PIG-IRON TRADE.

[FROM A CORRESPONDENT.]

It is impossible for any careful reader of your Journal to avoid noticing the great discrepancies which frequently appear in some of the market reports about Scotch pig-iron; and it is a very short time since I called the attention of your subscribers to the Liverpool report of the 11th June, folio 282, respecting the stock, which said—"Although the make is reduced considerably, it is amply sufficient to meet the actual demands, and the stock, about 300,000 tons, remains untouched." I now, however, see in the Liverpool report of the 26th June (14 days later), folio 306, and I presume furnished by the same party, that notwithstanding the opinion expressed that "it is likely to go considerably below 44s. 6d., and that the foundation for the late advance in price is destroyed," there is a tacit admission of a very large reduction in the stock, for it adds, and "with a stock of at least 250,000, tons, we cannot see what is to support the market." Can it be that your Liverpool correspondent has taken the trouble to ascertain the shipments and local consumption between the 11th and 26th June, and arrived at the conclusion that during those 14 days the stock which was stated about 300,000 tons has decreased to "at least 250,000 tons," or about 50,000 tons, without allowing anything for the make during that period. It is quite evident that there is a gross mistake in either one statement or the other, and I should say in both; and your readers will not be surprised at this last statement over-estimating the stocks some 50,000 or 60,000 tons. The deductions are about as absurd as the figures are incorrect; for allow me to enquire, what is likely to drive prices "considerably below 44s. 6d.?" Is it the diminished make, and the makers refusing to sell at the market rates? It should also be enquired why your correspondent has chosen to compare the shipments of this year and last from the Broomielaw and Port Dundas alone? For by his statement the shipments for May, 1850, were only 16,728 tons, against 23,891 tons in May, 1849; surely he must be vastly ignorant, or has a strong desire to mislead, as it is notorious that the shipments from the east and west coasts have been much larger this year. Why not give a statement of them also? Probably it would not suit the purpose. I refer your readers to the detailed statement in your Journal of last week, as furnished by myself—viz.: total, 36,680 tons; or, as another of your correspondents stated it, 36,677 tons, or about 5000 tons above the monthly average for the whole of last year; and it should be remembered that the local consumption has greatly increased. Your readers are aware that the ironmasters determined, on the 8th of May, to put out one-third of the furnaces for two months—more than half, however, have been standing for six weeks, as the prices ruling during the last two years have not been remunerating; and at that time I ventured to express an opinion that they would not be put in again until a much higher range of prices was established. The masters' decision yesterday proves that such an opinion was not rashly formed, as they determined to keep the one-third out for at least two months more, from the 11th inst.; and should that not be sufficiently long to produce an advance in prices, there is little doubt they will be kept out for a still longer period. It is not my business to hazard an opinion as to how high prices may advance, I merely desire, as far as possible, to give correct statements to your readers; but this I do fearlessly assert, that the production must be curtailed until higher prices are *established.*—*Glasgow, July* 4.

PIG-IRON WORKS IN SCOTLAND.

Works.	Furnaces, Jan. 1, 1850. *In.*	*Out.*	*Total.*	Furnaces, July 4, 1850. *In.*	*Out.*	*Total.*
Dundyvan	8	1	9	3	6	9
Clyde	5	2	7	—	7	7
Lugar	4	—	4	2	2	4
Muirkirk	1	3	4	1	3	4
Kinneil	4	—	4	2	2	4
Gartsherrie	16	—	16	10	6	16
Eglinton	3	1	4	—	4	4
Glengarnock	9	—	9	3	6	9
Carnbroe	3	3	6	—	6	6
Monkland	9	—	9	8	1	9
Langloan	6	—	6	3	3	6
Govan	4	2	6	4	2	6
Calder	5	2	7	2	5	7
Coltness	5	1	6	4	2	6
Dalmellington	3	—	3	—	3	3
Summerlee	6	—	6	4	2	6
Forth	4	1	5	3	2	5
Omoa	4	—	4	3	1	4
Shotts	4	—	4	1	3	4
Castlehill	2	1	3	2	1	3
Lochgelly	1	1	2	—	2	2
Blair	—	5	5	—	5	5
Garscube	—	2	2	—	2	2
Devon	2	1	3	1	2	3
Carron	2	3	5	1	4	5
Portland	2	—	2	—	2	2
Total	112	29	141	57	84	141

The ironmasters' quarterly meetings will be held next week as follows:—On Tuesday, at Walsall; Wednesday, at Wolverhampton; Thursday, at Birmingham; Friday, at Stourbridge; and on Saturday, at Dudley. The coal and lime masters' quarterly meeting will be held at Stourport, on Monday, the 15th inst.

THE REVENUE.—The official statement of the revenue for the quarter, which terminated yesterday, presents a favourable result. Compared with the corresponding quarter of last year, there is an increase of no less than 561,504*l.*, arising out of the subjoined sources of income:—

INCREASE—Customs	£204,931	
„ Excise	304,623	
„ Taxes	18,551	
„ Post-office	14,000	
„ Miscellaneous	11,334	—£553,439
To which must be added—Interest and other moneys	£ 25,952	
Repayments of advances	17,448	43,400
Total		£596,839
DECREASE—Stamps	£ 28,930	
„ Property Tax	6,405	35,335
Net increase on the quarter		£561,504

It is further satisfactory that the favourable character of the present return is not confined to the quarter that has just been completed; the increase on the year presents the very considerable amount of 1,215,867*l.*

BOARD OF TRADE RETURNS.—The accounts relating to the trade and navigation of the United Kingdom, for the month and five months ended the 5th June, continue to show the most extraordinary results. Notwithstanding the advices of overstocked markets in India, Australia, America, and other places, the demand for manufactured goods is greater at this time than at any former period, and the outgoings are without parallel. The exports for the month of May, compared with the corresponding month of 1848 and 1849, are as follows:—May, 1848, 3,704,788*l.*; May, 1849, 4,355,326*l.*; May, 1850, 5,959,949*l.*; showing an increase of 1,604,623*l.* over the same period of last year, and 2,255,166 over 1848; and for the first five months of this year, compared with the same period of last year and the year before, the results are thus shown:—First five months of 1848, 18,944,644*l.*; ditto, 1849, 21,191,973*l.*; ditto, 1850, 26,027,948*l.*; exhibiting an increase of nearly a million per month over last year, and a million and a half per month over 1848. The following particulars are from the declared value of exportations:—

	1849.	1850.	Increase.
Alkali (soda)	£18,503	£32,118	£13,615
Coals and Culm	80,252	121,729	41,477
Cordage and cables	10,706	12,194	1,488
Earthenware	53,278	82,563	29,285
Glass manufactures	19,674	28,182	8,508
Hardwares and cutlery	157,179	218,314	61,135
Machinery	46,130	126,627	80,497
Metals	616,019	869,313	253,294

STEAM VESSELS FOR SPAIN.—The Spanish Government has, through its agent here, entered into a contract with an eminent Glasgow firm for building two first-rate steam-vessels of 800-horse power; they are intended to run from Cadiz to Cuba and back as mail packets. Several steam-engines are being constructed to order, of private mercantile firms, for manufacturing purposes.

FOREIGN LENSES.—The Lords of the Treasury having had under their consideration a communication from the Admiralty, transmitting an application from Messrs. Miller and Sons, requesting that a number of lenses, manufactured at Munich, may be admitted into this country, notwithstanding the words "Miller's Patent, London," being engraved thereon, their lordships have been pleased, under the special circumstances of this case, to authorise the delivery of the articles in question, for the required purpose. The glass of Bavaria is renowned all over the world.

LATEST CURRENT PRICES OF METALS.

LONDON, JULY 5, 1850.

	per ton.
ENGLISH IRON. *a*	
Bar, bolt, & square, London	£5 2 6–5 7 6
Nail rods	6 5 0–6 10
Hoops	7 5 0–7 10
Sheets (singles)	7 15 0–8 5
Bars, at Cardiff & Newport	4 12 6–4 15
Refined metal, Wales*	3 5–3 10
Do. anthracite*	3 10 0
Pigs in Wales	3 0–3 15
Do. do. forge	2 10–2 15
Do., No. 1, Clyde ... *net cash*	2 4 6–2 5
Blewitt's Patent Refined Iron for bars, rails, &c., free on board at Newport*	3 10 0
Do., do., for tin-plates, boiler plates, &c., ditto	4 10 9
Stirling's Patent } in Glasgow	2 16 0
Toughened Pigs } in Wales	3 5–3 10
Staffordshire bars, at the works	6 0
Rails	4 15–5 0
Chairs	—
FOREIGN IRON. *b*	
Swedish	11 15–12 5
CCND	18 0
PSI	—
Gourieff	—
Archangel	—
FOREIGN STEEL. *c*	
Swedish keg	14 0–14 10
Ditto faggot	15 0
ENGLISH COPPER. *d*	
Sheets, sheathing, & bolts, *p. lb.*	0 0 9½
Tough cake	*per ton* 84 0 0

Tile	£83 0 0
Old copper *e*	*per lb.* 8½*d*
Yellow Metal Sheathing	8*d*
FOREIGN COPPER. *f*	
Chili	—
ENGLISH LEAD. *g*	
Pig	*per ton* 18 0–18 5
Sheet	19 0 0
Pipe	19 10 0
Red lead	19 0 0
White ditto	25 0 0
Patent shot	20 10 0
FOREIGN LEAD. *h*	
Spanish, in bond	—
ENGLISH TIN. *i*	
Block	*per cwt.* 3 14 0
Bar	3 15 0
Refined	4 0 0
FOREIGN TIN *k*	
Banca, H. C.	3 12–3 13
Ditto, for Export only	3 12–3 13
Straits	3 10–3 11
TIN-PLATES. *l*	
IC Coke	*per box* 1 7 0–1 7 6
IC Charcoal	1 12 6–1 13
IX ditto	1 18 0
SPELTER. *m*	
Plates, warehoused	*per ton* 14 15–15 0
Ditto, to arrive	—
ZINC. *n*	
English sheet	*per ton* 21 0 0
QUICKSILVER *o*	*per lb.* 4*s.*

Terms.—*a*, 6 months, or 2½ per cent. dis.; *b*, ditto; *c*, ditto; *d*, 6 months, or 3 per ct. dis.; *e*, 6 months, or 2½ per cent. dis.; *f*, ditto; *g*, ditto; *h*, ditto; *i*, ditto; *k*, net cash; *l*, 6 months, or 3 p. ct. dis.; *m*, net cash; *n*, 3 months, or 1½ p. c. dis.; *o*, ditto, 1½ dis.

* Cold-blast, free on board in Wales.

GLASGOW, JULY 4.—The ironmasters having resolved to keep out of blast one-third of the furnaces for two months longer, from the 11th inst., there was more disposition to-day on the part of buyers to do business. The market closed firm at 45s. 6d. cash for mixed Nos., free on board here.

THE IRON TRADE.—In last Saturday's Journal we noticed the preliminary meeting of ironmasters, held on the previous day, at Handsworth, and at which the trade was stated to be "deplorable." The *Wolverhampton Chronicle* of Wednesday has the following remarks:—"Some makers (we necessarily abstain from giving names) were represented as being almost totally without orders, others as having only a very limited amount, while, in other instances, forges and mills were represented to be tolerably well employed. The latter class was the exception, and the exception was generally considered to arise from adventitious circumstances, rather than from the general state of the trade. A conflict of opinion is represented to be prevailing as to whether the price of iron should recede or otherwise: it was resolved, however, to adhere to present prices, but under circumstances leaving the decision more than usually open to revision at quarter-day. As is usual in such a state of trade, antagonistic opinions are openly spoken of as being the result of individual position; but the general determination of the meeting may be taken to be adherence to present prices. Concession in price, it is plain, may go on until all parties are making at a loss. Little or no gain can at present be obtained; but no surer path to general ruin can be found than to manufacture with an acknowledged want of profit. The more extensive the orders executed at unremunerating prices, the more extensive the loss. Cheapness of price must not be taken as a rule for stimulating demand. It is the want of the article, principally, that occasions demand. The determination on quarter-day is looked for with considerable solicitude. To quote prices in the present state of the trade would convey no information, as every bargain is determined by the private opinion of buyer and seller. No rule prevails."

EXPORTATION OF THE PRECIOUS METALS.—The following are the officias returns of the exports of silver from the port of London for the past week:—Silver bar; to St. Petersburg, 603,788 ozs.; coin to ditto, 523,890 ozs.; ditto to Dunkirk, 200,000 ozs. 1 ditto to Belgium, 29,000; ditto to Boulogne, 2200 ozs.—Total, 1,358,878.

CURRENT PRICE OF GOLD AND SILVER.

Foreign gold, in bars	per oz. £3 17 9	New dollars	per oz. £0 4 10½
„ Portugal pieces	0 0 0	Silver in bars (standard)	0 4 11½

FLUCTUATIONS IN STOCKS AND SHARES.

DURING THE MONTH OF JUNE.

Stocks and Shares.	Share.	Paid.	Pr. June 1.	Highest.	Lowest.	June 30.
Consols	—	—	95*	96¾*	94¾*	96¼ ex
Exchequer Bills	—	—	70*s* pm.	71*s* pm.	66*s* pm.	67*s* to 7*s* pm.
RAILWAYS.						
Brighton	Stock	£100	£83½	£84	£81½	£83½
Caledonian	50	50	10½	10½	7½	7½
Eastern Counties	20	20	7¼	7¼	7¼	7¼
Great Northern	25	24	10¾	11¼	9¾	10
Great Western	100	100	59	60	57	58½
London and North-Western	Stock	100	107	110½	106	109
Midland	Stock	100	37½	38	35	35½
North Staffordshire	20	17½	8	8¼	6¼	6¾
South-Eastern	£33 2 4	33 2 4	15	15½	14½	14¾
South-Western	Stock	100	64½	65	57	57½
York, Newcastle, & Berwick	Stock	25	14¾	15¼	14¾	15
York and North Midland	50	50	17½	17¾	16	16½
Boulogne and Amiens	20	20	6¼	6¼	6¼	6¼
Northern of France	20	16	13¾	14	13¾	13¾
East Indian	20	7	7¼	7¼	7¼	7¼

The range of Consols has been 1¼ per cent., and the tendency throughout the month has been towards an advance. In railway shares, on the contrary, most descriptions again show a fall, which in many cases has been severe.—*Times.* * Ex div.

New Patents.

SPECIFICATIONS ENROLLED DURING THE PAST WEEK.

F. G. SPRAY and G. NEVETT, Hampstead-road, Middlesex, engineers: For an improved steam-engine, parts of the arrangements of which may be applied to apparatus for regulating, measuring, and registering the flow of liquids and gases.

Claim.—An improved rotary engine, in so far as regards a peculiar construction of the piston, a lubricator, a self-acting feed apparatus, an alarm whistle, a water and steam-indicator, and salinometer, and the application generally of the said feed apparatus, alarm whistle, and water and steam indicator to regulating, measuring, and registry of the flow of liquids and gases.

W. BARLOW, Blackheath, C.E., and W. H. BARLOW, Derby, C.E., for improvements in the permanent ways of railways: The patentees describe and claim—1. Casting the bearers of that part of the permanent way where there are switches or crossings with two or more chairs.—2. Supporting the lines of rails by means of transverse and longitudinal bearers combined, having two or more chairs cast thereon.—3. Rivetting trough-rails to bearers, which are connected by transverse pieces to maintain the guage.—4. Constructing railway turn-tables, which are supported at the centre by a screwed pin, and of iron plates rivetted together, and to a number of T-pieces of iron arranged radially around the centre, and within an iron ring, which is furnished on the underside with rollers.

J. SIDEBOTTOM, Pendlebury, Lancaster, manager, for certain improvements in steam-engines: This invention consists in connecting a system of levers and adjustable gearing to the governor and to the throttle valve and air-pump of a steam-engine, in order that, when it shall have attained an undue velocity, its further motion will be arrested by the closing wholly or partially of the valve, and by the admission of air into the condenser; also, in an arrangement of apparatus whereby the increased velocity of the governor shall cause a bell to ring, for the purpose of indicating this circumstance to the engineer.

LIST OF PATENTS GRANTED DURING THE PAST WEEK.

W. Lancaster, of New Bond-street, Middlesex, gunmaker, for improvements in the manufacture of fire-arms and cannon, and of percussion tubes.

J. C. Haddan, of Bloomsbury-square, in the county of Middlesex, civil engineer, for improvements in the construction of carriages and of wheels, and in brickwork.

F. E. Colegrave, Esq., of Brighton, for improvements in the valves of steam and other engines, in causing the driving wheels of locomotive engines to bite the rails, and also in supplying water to steam-boilers.

C. Phillips, of the city of Bristol, engineer, for improvements in apparatus or machinery for cutting turnips, and other similar substances, as food for cattle.

R. Hornsby, of Spittlegate Grantham, in the county of Lincoln, agricultural implement manufacturer, for improvements in machinery for sowing corn and seeds, and in depositing manure in thrashing machines, in machines for depositing or winnowing corn, and in steam-engines and boilers for agricultural purposes.

J. Thomson, of Glasgow, civil engineer, for improvements in hydraulic machinery, and in steam-engines.

R. Winter, gentleman, of New Cross, in the county of Kent, for improvements in metallic vessels for measuring and holding liquids.

J. W. Hoby, of Blackheath, engineer, for certain improvements in the construction of parts of the permanent ways of railway, and in shaping iron.

F. R. Hodge, civil and mechanical engineer, of Adam-street, Adelphi, for improvements in certain descriptions of steam-engines, and in the apparatus and management for cultivating and manuring the soil, and in treating the produce thereof.

W. Pim, of the town or borough of Kingston-upon-Hull, engine and boiler maker, for certain improvements in the construction of the boilers and funnels of steam-engines.

C. Starr, of New York, in the United States of America, improvements in bookbinding.

J. Kingsford, Esq., Essex-street, Strand, improvements in refrigerating and freezing.

W. Tuxford, of Boston, in the county of Lincoln, for improvements in machinery for crushing or pressing land, and for shaking straw; also improvements in applying steam-power to agricultural machinery.

DESIGNS FOR ARTICLES OF UTILITY REGISTERED.

S. Sharp, Stamford, lump sugar cutting machine.

Webb and Greenway, Birmingham, cupboard fastener.

J. and G. Johnston, Paisley, cutting apparatus for bottom tops.

Hopwood and Armstrong, St. George's-street, Wellclose-square, a door and apparatus for closing the opening of ships' scuttles.

A. Ettrick, Highbarne, Sunderland, travelling bag or portmanteau.

C. Cowper, Southampton-buildings, Chancery lane, an addition to a braiding machine.

H. A. Jowet, Sawley, Derby, parts of a signal lamp.

J. Woods, Stowmarket, Suffolk, bruising and grinding mill.

G. Simpson, Spurrier-gate, York, the York coat or paletot.

W. Walker, Manchester, ventilating chimney tube.—*Mechanics' Magazine.*

Current Prices of Stocks, Shares, & Metals.

MINES.—There does not appear to have been more than an average amount of business transacted during the week. We have had inquiries for shares in several mines, but the prices generally were under the quotations; in some instances, however, shares have been done at an advance.

In last week's Journal we gave the list of dividends paid by 32 Cornwall and Devon mines, amounting in the aggregate to 94,303*l.* In this list a few private mines were not included, and several others left out, in order to be corrected. We have not yet obtained particulars of Par Consols, but we republish the list, adding—Wheal Seton, 2970*l.*; Great Work, 2380*l.*; Fowey Consols, 741*l.*; Wheal Reeth, 600*l.*; and Trethellan, 600*l.* —making a total in 37 mines of 101,594*l.*

From a clerical error in a statement furnished from the office of the Welsh mines, Goginan was stated to have paid 4500*l.*, and Lisburne, 1500*l.*; whereas it should have been—Lisburne, 4500*l.*, and Goginan, 1500*l.*

Since last week, the following mines have paid further dividends, but which, of course, are not included in the list:—

South Frances	£1860	0	0
North Pool	2500	0	0
Wheal Reeth	600	0	0
Goginan	500	0	0

Inquiries are being made for West Caradon, South Basset, Treviskey and Barrier, Alfred Consols, Tremayne, &c.

At the South Wheal Frances two-monthly meeting for April and May a dividend of 15*l.* per share was declared, carrying to credit of the next account a balance of 1123*l.* 12s. 7d. The ores sold during that period realised 4038*l.* 1s. 5d., giving a profit of 1775*l.* 14s. 5d.: which, added to balance from last account, allowed a dividend of 1860*l.* The mine is represented in a very flourishing position.

At Wheal Reeth account, a dividend of 5*l.* per share was declared.

At the two-monthly account of North Pool, a dividend of 25*l.* per share was declared, carrying to balance of next account, 856*l.* 19s. 3d. A profit of 2374*l.* was made for March and April.

A dividend of 5*l.* per share has been declared on Goginan from the past two months' profits, payable at the offices of Messrs. John Taylor and Son.

At the Fowey Consols meeting the accounts showed—Ores sold in the four months ending April 30, 13,943*l.* 13s. 7d., and a profit of 1242*l.* 6s. A dividend of 30s. per share was declared: leaving balance of 6997*l.* 6s. 2d. It was resolved to erect a " man engine," as the mine was getting deep and hot—some observations on which will be found in a leading article.

The mines reported to have improved since our last are South Tolgus, South Tamar, Wellington, Bedford United, South Basset, East Crowndale, and Wheal Golden.

At Kit Hill Mine, in clearing up some old workings, a solid branch of tin, from 2 to 4 in. wide, has been discovered in the bottom of the level.

Wheal Bawden gives indications of considerable improvement. A sample of ore was assayed a few days since, giving 65 per cent. for lead, and 225 ozs. to the ton of ore.

At Hennock Mine, a very considerable improvement has taken place in the 10 fm. level, which is reported to be worth 1 ton per fm., and still improving. The reports of Mr. Evan Hopkins and Mr. Adam Murray, jun., who were recently appointed to inspect the mine, are now anxiously looked for. These gentlemen were selected in consequence of a most condemnatory report from a pratical agent, who was requested to furnish his opinion at the last general meeting.

The weekly report from Wheal Crebor states that the water in Cock shaft was forked, when it was found that the end of the 24 fm. level, on the south lode, contained small branches of rich yellow ore, and the lode improved in size and character towards the end.

From Herodsfoot Mine 78 tons of silver-lead ores were sold on the 1st, at 12*l.* 5s. 6d. per ton, amounting to 957*l.* 9s., being one month's raisings.

North Wheal Friendship Mine sold, on the 25th June, to Messrs. Locke, Blackett, and Co., 20 tons of lead ore, at 10*l.* 10s. per ton.

From the Callington Mines 45 tons of silver-lead ores were sold on Wednesday, the 3d inst., at 17*l.* 17s. 6d. per ton, to Thos. Somers, Esq.

At Wheal Blencowe meeting, the accounts for the three months ending April were balanced, showing 85*l.* 16s. due to the purser; to discharge which, and for future operations, a call of 10s. per share was made. The agent's report states that the operations have been chiefly confined to driving the 20 fm. level, with a view of intersecting the east and west lodes, the more southerly of which is expected to be cut in about six weeks. The north and south lode, on which they are now driving, continues without any important alteration.

At Wheal Calstock meeting, the account was made up to end of April, and the balance found against the adventurers appears to be 547*l.* 4s. 9d. Three additional setts have been secured, and the mine is to be called Calstock Consols; to effectually develope the whole, additional capital is necessary, and to effect which, the mines are to be divided into 512 shares; and a call of 25s. per share was made on 441 shares, and the 71 unappropriated ones to be sold to the shareholders by tender. The agent's report represents the prospects to be of a very encouraging character. A market has been obtained for the mundic, with which the lodes are strongly impregnated: 180 tons are now ready for shipment.

At the usual two-monthly meeting of the Llwynmalees shareholders, the accounts showed a balance of about 400*l.* in favour of the company, after paying May costs, the steam-engine, and all other expenses, attending its erection, &c. The engine is expected to be at work in about a fortnight from this date.

At the quarterly meeting of the Callington Mines Company, the statement of accounts showed a balance of 2714*l.* 8s. 3d. against the mine; whilst there was a balance in favour of Kelly Bray Mine of 297*l.* 5s. 6d. By a resolution adopted, the accounts of Kelly Bray department, in future, are not to be kept separate from the Callington Mines. We consider the agent's report generally rather more encouraging than that presented at the last meeting: 45 tons of rich silver-lead ore were sold on the same day, realising 17*l.* 17s. 6d. per ton.

At the annual meeting of the Lewis Mining Company, the directors' and agents' reports represented the mine in a very gratifying position. During the last six months, the mine has made considerable progressive improvements, and the results have been profitable, inasmuch that the balance against the company at the last account has been considerably lessened. In May, 1849, their sales of tin were about 900*l.*; and for the past three months they have averaged 1600*l.* per month. It is calculated that early and continuous dividends will be made.

At the general meeting of Treloweth Consols, the accounts for the quarter ending April were audited, showing an expenditure of 1458*l.* 3s. 5d., including the cost for the 60-in. steam-engine and May costs. The agent's report stated that the steam-engine, and other surface requisites, were rapidly progressing towards completion.

At the East Trescoll meeting, the secretary stated that a much greater number of shares had been taken up than he had anticipated—314 only remaining, for which a gentleman present immediately subscribed. Mr. Brand was appointed purser, and instructed to proceed to order the engine and machinery to develope the mine, which holds out great promise, with all possible dispatch. A call of 10s. per share was made.

At the half-yearly meeting of the Mining Company of Ireland, held in Dublin, on Thursday, a favourable report was read, congratulating the shareholders on the prospect of an early return of former prosperous times when handsome returns were made. No dividend was declared.

At the meeting of Cameron's Coalbrook Steam-Coal and Swansea and Loughor Railway Company, a large number of proprietors attended, and the meeting was, happily, very unanimous. It appeared to be the general opinion that the property was undoubtedly highly valuable, and that the company had arrived at a point when it only wanted co-operation and unanimity to develope its resources to the benefit of the shareholders. A call of 2*l.* per share was made, payable on 1st Sept., which was responded to unanimously.

At the meeting of West Wheal Friendship, the shareholders resolved on considering the application for 200 shares, relinquished about two years since, on which the holders were unable to continue the calls, a large portion of which have been readily taken up by influential parties, which we are pleased to hear, as the mine well merits further development.

Shares in the following mines have changed hands during the week:—Devon Great Consols, East Wheal Rose, South Basset, West Caradon, Trelawny, East Buller, Pendarves, Bedford United, East Tamar, Herodsfoot, Hennock, Daren, Gustavus, Alfred Consols, Tremayne, Camborne Consols, Trefusis, Tincroft, Wheal Bawden, West Polgooth, Mary Ann, Stray Park, Wheal Langford, Tavy Consols, South Tamar, Wheal Trescoll, Hawkmoor, St. Aubyn and Grylls, Drake Walls, Wheal Franco, Allt-y-Crib, South Frances, Wheal Buller, &c.

In Foreign Mines transactions have taken place in Santiago, St. John del Rey, United Mexican, Barossa Range, Cobre, Imperial Brazilian, Linares, Australian, &c. By recent accounts from South Australia, we learn that the directors of the Burra Burra intended to declare a dividend at the rate of 200 per cent. in March last.

The National Brazilian advices are to the 4th of April, and furnish the returns from Cuiaba from the 19th to 27th March, mks. 2 0 6 18; Cocaes from 24th March to 4th April, mks. 4 0 0 17 = 6 0 6 35. The intervention of the Easter holidays had considerably delayed the works.

Linares weekly report presents nothing important. The pitches are represented as continuing productive, and the amount of lead now in store is about 46 tons.

The Imperial Brazilian Mining Association have received letters to the 3d of April. The gold report gives the produce from 23d March to 3d April from the two mines at 4 lbs. 6 ozs. 12 dwts, the total from the 1st January being 94 lbs. 3 ozs. 15 dwts. The manager reports that the operations have been retarded, in consequence of the Easter holidays, and no discovery has been made.

The usual monthly despatches have been received by the Copiapo Mining Company to the 29th April. The mining report for March is of a very flattering character, inasmuch that the Checo, San Pedro, and La Compania Copper Mines, are represented in a very productive position. At La Reyna Copper Mine, the lode in Nos. 2 and 3 shafts are from 2 to 3 ft. wide, producing ore of superior quality. The produce for the month appears to be 74 tons—Checo returning 34 tons, San Pedro 20 tons, and La Compania and La Reyna 10 tons each. The *Cuba*, of 500 tons, had arrived at Copiapo on the 12th April for freight, and would be dispatched as early as possible. The silver mines continue to hold out the most gratifying results, especially the mine Al Fin Hallada, which is producing some excellent work. The gold mines are reported very favourably, and the prospects are highly encouraging.

PRICES OF MINING SHARES.

It having been suggested by many of our readers and valued correspondents that it would be highly desirable to give in our Share List the locality of each Mine, and the mineral produced, we intend commencing to give such information in our next Number, and shall feel obliged to all agents, and others interested, to forward us correct particulars of the parish in which each mine is situate, and whether productive of Copper, Lead, Tin, or other mineral, with the Number of Shares, and the Amount Paid thereon.

BRITISH MINES.

Shares.	Company.	Paid.	Price
1000	Abergwessin	9	—
1024	Alfred Consols	8¾	28 30
1248	Allt-y-Crib	5	5 5½
1024	Arundell	2¼	—
1024	Ashburton United Mines	9¾	—
1624	Balleswidden	9	14
128	Balnoon Consols	42½	20
905	Barristown	5¾	3
3650	Bawden	¼	⅝ ¾
6000	Bealbury	1	1
4000	Bedford	2½	4¼ ¾
1280	Birch Tor & Vititer	10½	7½ 8
5000	Black Craig & Craigton	—	5
8000	Blaenavon	50	12½
5000	Blisland Consols	1	—
1024	Bodmin Consols	3	3
5000	Bodmin Moor Consols	1	3
60	Bosorn	4½	10 12½
100	Botallack	182	110
2000	Bottle Hill	2	2
120	Brewer	5	2½
10000	British Iron, New, regis.	12	8
—	Ditto ditto, scrip	10	10
2400	Bryn-Arian	2	1½ 2
107	Buduick Consols	52½	10 11½
260	Butterdon	1	2 3
1000	Callington	26	3½ ¾
1000	Camborne Consols	7	3 5
20000	Cameron's Steam Coal	7	—
256	Caradon Mines	22½	10
256	Caradon United	24	5 8
1536	Caradon Vale	¾	1 1½
1000	Carbona	5	12 15
1000	Carn Brea	15	125 140
1000	Carthew Consols	1½	7
113	Charlestown	220	—
500	Comblawn	5½	4½
128	Comfort	45	80
256	Condurrow	20	80
2560	Cook's Kitchen	14	5½ 6
1000	Coombe Valley Quarry	5	5 5½
1000	Copper Bottom	7½	—
900	Court Grange	9	10
212	Craddock Moor	23½	5
256	Crane and Bejawsa	2	10
128	Creeg Braws	120	30
500	Cubert Mine	12½	—
1000	Cwm Erfin	4	3½ 4
1000	Daren	2	7 7½
7100	Derwent	10	3
502	Devon & Courtenay Con.	11½	3 3½
1024	Devon Great Consols	1	235
1000	Dhurode	2	5
182	Dolcoath	30	20
2560	Drake Walls	6½	3 4
10000	Durham County Coal	45	9
3000	Dyfngwm	10	5
2500	East Birch Tor	3	3
1024	East Buller	2	4¾ 5
2048	East Crowndale	7½	1½
256	East Godolphin	10½	13
4000	East Gunnis Lake Junc.	¼	⅜ ¼
128	East Pool	15	80
9000	East Tamar Consols	1½	1¾ 1½
256	East Tolgus	1½	7
1000	East Trescoll	1	1½
128	East Tywarnhayle	1	3
94	East Wheal Crofty	125	95
128	East Wheal Rose	50	472 ½
256	East Wheal Seton	2½	2¾
—	East of Scotland Iron Co.	5	1½
1280	Esgair Llee	2	4
248	Exmoor Wh. Eliza	11	8 10
494	Fowey Consols	40	30
1024	Freidd Llwydd Mines	1½	3½
256	Garras	41	23
4000	Gen. Mining Co. for Irel.	1½	4
2500	Georgia Consols (Tin)	1	3
100	Goginan	5	—
256	Gonamena	44½	16
128	Goonvrea	4	2
256	Grambler & St. Aubyn	80	17½
96	Great Consols	1000	250
512	Great Wheal Baddern	—	50
512	Gt. Wh. Rough Tor Con.	24½	20
6000	Growa Slate Company	5	5
1026	Gustavus Mines	3	3½
1024	Hawkmoor	5	15
6000	Heigaston Down Con.	2½	3 3½
1500	Hennock Silver-Lead	21s	3½
4500	Hennock Iron & Tin	21s	21s
512	Herodsfoot	16	14 15
10000	Hibernian	12½	1¾
1000	Holmbush	23	10
1900	Keswick	10	2 3
1024	Kingsett and Bedford	3¾	4½
787	Kirkcudbrightshire	8½	5 5½
2048	Lamberooe Wh. Maria	10	6 7
252	Lanarth Consols	—	10
256	Lelant Consols	47	17½ 20
160	Levant	—	180
1000	Lewis	17	9½ 10
100	Lisburne	75	—
1000	Llwynmalees	9½	9 10
3600	Llynvi Iron	50	50
6000	Marke Valley	10	⅞ 1
5000	Mendip Hills	3¾	1¾ 2¼
128	Metha	34	—
256	Mineral Court	—	25
20000	Mining Co. of Ireland	7	4½
1024	Moditonham & Marrabro'	1½	3½
1024	New East Crowndale	2	2
6000	North Basset	—	15
1200	North Buller	1½	3 ¾
100	North Pool	45	450 475
140	North Roskear	5½	160
262	North Wh. Leisure	1½	2
512	North Wheal Vor	—	2½
128	Par Consols	55¾	650
1026	Pendarves Consols	2	7½ 7¾
1000	Pendarves & St. Aubyn.	4	5½ 6
4934	Pennant & Craigwen	3	4 4½
1000	Penybank and Erglodd	4	5
1024	Penzance Consols	22s 3d.	3½ 4
5000	Peter Tavy & Mary Tavy	¼	¾
512	Plymouth Wh. Yeoland	6½	6
112	Providence Mines	—	140
2500	Rhoswiddol & Bacheiddon	10	10
10000	Rhymney Iron	50	12
10000	Ditto New	7	3
5000	Roche Rock Tin	1	1¾ 2

BRITISH MINES—*continued.*

Shares.	Company.	Paid.	Price.
5000	Rocks Mine	4½	6 7
2048	Runnaford Coombe Tin	2½	5
9000	South Tamar	1	2¾ 3
128	South Caradon	5	270
1100	South Dolcoath	6	¾ 1
256	Sth. Friendsh. Wh. Ann	30	28 30
256	South Molton	7	12 13
1024	South Plain Wood	1	5 6
300	South Speed	10	20
256	South Tolgus	16 132½	35 40
256	South Trelawny	28½	5 8
2000	South Wales Mining Co.	1	1
256	South Wheal Basset	10½	295 300
124	South Wh. Frances	160	560
256	South Wh. Josiah	2	3½ 4
10000	Southern & Western, Irish	2½	4
280	Spearne Moor	30	40
128	Spearne Consols	10	60
256	St. Aubyn and Grylls	2½	7½ 8½
94	St. Ives Consols	—	80
128	St. Michael Penkivel	5	10½
999	St. Minver Consols	1	6
1000	Stray Park	43	21 2 3
9600	Tamar Consols	3	4 ½
10240	Tavistock Consols	¼	¾
687	Tavy Consols	8	3 3½
6000	Tincroft	7	11½ 12
1024	Trelusback	—	7½ 9
240	Tolcarne	8	17
5000	Tregear Consols	1	2 2½
256	Tregorden	3½	6 7½
256	Trehane	1½	25 30
5000	Treleigh Consols	6	3½
200	Trelyon Consols	—	2½
2000	Trenance	3	—
1500	Trenault Lime Quarries	2	3
96	Tresavean	10	100
120	Trethellan	5	25 30
120	Treviskey and Barrier	130	250
512	Trethevy Copper	2½	3½
512	Treville (Lewanick)	¾	7½
1000	Tyllwyd	2	2½
200	United Mines	50	160
256	Wellington Mines	25	27½
128	West Buller	10	600
256	West Caradon	20	92½ 95
512	West Fowey Consols	40	12
1024	West Par Consols	5	—
2500	West Polgooth	5	7
512	West Providence	10	20
200	West Seton	45	180
120	West Trethellan	5	20
512	West Wheal Frances	1¾	10
1024	West Wh. Friendship	3	3 4
3845	West Wheal Jewel	12	2 ¼
940	West Tolgus & Treloweth	12½	5½ 6
500	West Wheal Towan	2½	11 12
1024	West Wheal Treasury	7 11½	12 12½
1024	West Wheal Virgin	¼	⅛
1024	Whiddon Mines	4¾	—
5200	Wicklow Copper	5	15
5000	Wicklow Copper and Sulphur Mines	3	3½ 3¾
107	Wheal Adams	130	150
1000	Wheal Agar	—	6
256	Wheal Albert	10	28 29
128	Wheal Ann	—	50½
512	Wheal Anna Maria	7	4
120	Wheal Bal	10	22
256	Wheal Benny	19	5
1021	Wheal Bray	11½	—
212½	Wheal Calstock	9	10
256	Wheal Carpenter	—	7½
268	Wheal Courtenay	20	23
182	Wheal Elizabeth	9	20
1024	Wheal Emily	3	5
256	Wheal Fortescue	15	—
100	Wheal Friendly	70	66½
764	Wheal Franco	27	13 15½
4000	Wheal Golden	2	5 6
1000	Wheal Grose	3¾	—
256	Wheal Harriet	—	20
100	Wheal Henry	—	40
1024	Wh. Jane (Landulph)	1½	3¾
256	Wheal Kingston	¼	1½
6000	Wheal Langford	¼	2 3
1024	Wheal Langmaid	¼	⅞ 1
1024	Wheal Lawrence	3½	3½
112	Wheal Margaret	79	180
512	Wheal Mary Ann	5	42 43
360	Wheal Oak	25½	5
3000	Wheal Penhale	1½	6
210	Wheal Prospect	4	7
1024	Wheal Providence	1	2½ 3
120	Wheal Reeth	41	120
198	Wheal Seton	107	270
1056	Wheal Sarah	5	6
512	Wheal Sophia	6¾	7
128	Wheal Squire (St. Erth)	—	5
128	Wheal St. Ann	30	35
1100	Wheal Trescoll	6¾	5 6
260	Wheal Trelawny	7¾	86 90
256	Wh. Tremaine (St. Ervan)	9½	2½
1024	Wheal Tremayne	9¾	11½
267	Wheal Tryphena	40	62½
512	Wheal Venton	2½	3½ 4
1000	Wheal Vincent	5½	7
128	Wheal Vlow (Perranz.)	2	5
184	Wheal Vyvyan	—	60

FOREIGN MINES.

Shares.	Company.	Paid.	Price.
5000	Alten Mining Company	14½	2½ 2¾
15000	Asturian Mining Co.	15	1½ 2
20000	Australian	4	3½ 3¾
6000	Barossa Range	[illegible]	1½ 2
10000	Brazilian Imperial	23	6
12000	Cobre Copper Co.	40	34 34½
10000	Copiapo Mining Co.	14	3½ 4
20000	General Mining Ass'n.	20	13
4000	Guadalcanal	5	1
2000	Ditto Preferential	2½	2
5000	Kinzigthal Mining Ass.	2	¾
5000	Linares	3	2½ 3
500	Ditto New	3	3 3½
5051	Mexican Company	59½	—
20000	Mexican & South Amer.	8	1 1½
5000	National Brazilian	30	3
104000	N. Brit. Australasian	1	9s 10s
7000	Royal Santiago	10	9 9½
11000	St. John del Rey	15	13½
43174	United Mexican ... Av.	28½	5½
10,000	Worthing, Cop. (S. A.)	2	2 2½

JOINT-STOCK BANKS.

Shares.	*Companies.*	*Paid.*	*Div. p. cent.*	*Price.*
22,500	Australasia	£40	£1½	£25½
20,000	British North American	50	6	42 42½
20,000	Colonial	25	5	7
20,000	Commercial of London	20	6	24½
10,000	London and County	20	6	—
60,000	London Joint-Stock	10	6	17¾
40,000	London and Westminster	20	6	27½
10,000	National Provincial of England	35	6	37
10,000	ditto New	10	5	—
20,000	National of Ireland	22½	5	18½
20,000	Provincial of Ireland	25	8	43
10,000	South Australia	22½	6	19¾
20,000	Union of Australia	25	6	33½
60,000	Union of London	10	6	12¾ 12½
15,000	Union of Madrid	40	—	—

CORNISH STEAM-ENGINES.

[Abstract from Browne's *Cornish Engine Reporter*, from May 20 to June 20.]

PUMPING-ENGINES.

Number reported	28
Average load per square inch on the piston, in lbs.	13·1
Average number of strokes per minute	5·4
Gallons of water drawn per minute	5943
Average duty of 21 engines—being million lbs. lifted 1 foot high, by the consumption of 1 cwt. of coals	68·0
Actual horse-power employed per minute	1212·7
Average consumption of coals per horse-power per hour, in lbs.	4·1

ROTARY-ENGINES—WHIMS.

Number reported	20
Number of kibbles drawn	76,630
Average depth of drawing, in fathoms	133·6
Average number of horse-whim kibbles drawn the average depth, by consuming 1 cwt. of coals	50·7
Average duty of 14 engines, as above	19·5

STAMPS.

Number reported	7
Average number of strokes per minute	13·9
Average duty of 7 engines, as above	40·2
Actual horse-power employed per minute	176·5

PUMPING-ENGINES DOING HIGHEST DUTY.

Par Consols	80-inch single	*Millions* 104·7
Fowey Consols	80-inch single	98·2
Great Polgooth	80-inch single	82·2
Par Consols	72 and 36-inch Sims's combined	80·2
West Fowey Consols	60-inch single	78·1
North Pool	50-inch single	77·7
Stray Park	60-inch single	76·5
Trelawny	50-inch single	75·9

WHIM-ENGINES.

Fowey Consols	22-inch double	*Millions* 26·1
Great Polgooth	22-inch double	24·4
ditto	22-inch double	23·6
Par Consols	24 & 13-inch Sims's combined	22·2
ditto	24-inch single	21·5
Trelawny	24 and 14-inch Sims's combined	20·2

STAMPING-ENGINES.

Great Polgooth	35-inch double	*Millions* 58·6
Tamar	30-inch single	48·1
Lewis	52 and 28-inch Sims's combined	44·2
South Caradon	26-inch single	40·2

LEAD ORES.

TICKETINGS FOR ABOUT 100 TONS (20 cwts.) NEWTONARDS LEAD ORE.

Douglas, Isle of Man, July 3.

Bidders.	*Price per Ton.*
Combmartin and North Devon Smelting Co. (purchasers)	£10 0 0
Newton, Keates, and Co.	9 15 0
Walker, Parker, and Co.	9 10 0
Sims, Willyams, and Co.	9 0 0
Tamar Smelting Company	8 15 0
Thomas Somers	8 8 6

Sold at Aberystwith,

Mine.	*Tons.*	*Price per Ton.*	*Purchasers.*
East Logylas	50	£10 10 0	Walker, Parker, and Co.
ditto	25	10 10 0	ditto
ditto	25	10 10 0	Panther Company.
Frongoch	80	10 5 0	ditto
Graigoch	30	9 11 6	Michell and Son.
Sold at Liskeard.			
Herodsfoot	78	£12 5 6	B. Somers.
Tregorden	5	23 10 0	Newton, Keates, and Co.
Sold in London, 3d July.			
Callington	45	£17 17 6	T. Somers.
Sold at the Mine, 25th June.			
North Wheal Friendship	20	£10 10 0	Locke, Blackett, and Co.

COPPER ORES.

Sampled June 19, and Sold at Tyack's Hotel, Camborne, July 4.

Mines.	*Tons.*	*Price.*	*Mines.*	*Tons.*	*Price.*
North Roskear	117	£4 7 6	Tincroft	62	£3 16 6
ditto	99	6 4 0	ditto	60	0 17 6
ditto	81	4 11 6	ditto	59	3 14 0
ditto	79	1 7 6	ditto	54	2 7 6
ditto	60	1 6 6	ditto	52	4 14 6
ditto	56	1 18 6	ditto	39	4 2 6
ditto	55	5 1 0	ditto	38	3 5 6
ditto	47	7 19 6	ditto	30	3 19 0
ditto	44	7 1 0	Wh. Seton	84	4 19 6
ditto	43	7 1 0	ditto	82	4 4 0
ditto	20	1 9 0	ditto	76	5 15 0
North Pool	105	3 19 6	ditto	72	5 2 6
ditto	103	1 10 6	ditto	54	2 6 6
ditto	102	4 4 6	ditto	51	3 6 6
ditto	91	3 12 6	Fowey Consols	84	6 14 0
ditto	63	2 8 6	ditto	80	6 5 0
ditto	52	3 2 6	ditto	78	5 16 6
ditto	51	2 8 6	ditto	68	2 18 0
ditto	45	2 8 0	Wh. Basset	123	3 1 6
Consolidated	110	6 12 6	ditto	57	6 15 0
ditto	96	7 6 0	ditto	51	3 19 0
ditto	84	5 14 6	ditto	50	21 5 0
ditto	77	4 15 6	South Wh. Frances	83	5 17 0
ditto	76	4 16 6	ditto	52	10 13 6
ditto	61	6 17 6	ditto	51	10 14 6
ditto	49	4 0 6	ditto	38	8 0 6
Tincroft	90	3 7 6	ditto	9	5 16 0
ditto	67	1 19 0	Todd's Regulus	5	3 3 0

TOTAL PRODUCE.

North Roskear	701	£3075 18 0	Fowey Consols	310	£1714 7 0
North Pool	612	1882 4 6	Wh. Basset	281	2026 18 6
Consolidated	553	3261 8 6	South Wh. Frances	233	1944 15 6
Tincroft	551	1720 2 6	Todd's Regulus	5	15 15 0
Wh. Seton	419	1863 8 6			

Average Standard ....£104 6 0 | Average Produce 7½

Average Price per ton £4 16 0

Quantity of Ore ....3665 tons | Quantity of Fine Copper, 264 tons 8 cwts.

Amount of Money £17,504 18 0

LAST SALE.—Average Standard ......£105 6 0.—Average Produce...... 6¾

Standard of corresponding sale last month, 105*l.* 7s.—Produce, 6¾.

COMPANIES BY WHOM THE ORES WERE PURCHASED.

	Tons.	Amount.
Mines Royal	211	£946 0 11
Vivian and Sons	934	3628 4 0
Freeman and Co.	662	2990 15 6
Grenfell and Sons	410	1659 9 4
Sims, Willyams, and Co.	365	2189 15 0
Williams, Foster, and Co.	844	5076 16 3
Schneider and Co.	239	1022 17 0
Total tons	3665	£17,504 18 0

Copper ores for sale on Thursday next, at Andrew's Hotel, Redruth.—Mines and Parcels.—Carn Brea 692—Tywarnhayle 441—Wheal Buller 354—Par Consols 301—Levant 242—Alfred Consols 150—West Wheal Treasury 125—Wheal Agar 81—Wheal Tremayne 43—Pendarves Consols 41—Great Work 20.—Total, 2490 tons.

Copper ores for sale on Thursday week, at the Royal Hotel, Truro.—Mines and Parcels.—Devon Great Consols, Wheal Josiah, Wheal Maria, Wheal Fanny, and Wheal Anna Maria, 1346—West Caradon 342—Fowey Consols 298—Wheal Friendship 243—Poldice 168—Bedford United Mines 117—Wheal Mary 75—Tamar Slag 23—Wheal Jewel 15—Wheal Maiden 13.—Total quantity of ore to be sold, 2610 tons.

QUARTERLY SALES OF COPPER ORES IN CORNWALL—JUNE 30.

Copper ores	39,680 tons (21 cwts.)
Fine copper	3056 tons 5 cwts.
Amount of money	£205,095 1s.
Average produce	7¾ 1-16th.
Average standard	£102 16s.
Average price per ton (21 cwts.)	£5 3s. 6d.

COPPER ORES

At SWANSEA, for sale July 11.—Cobre 86, ditto 76, ditto 70, ditto 68, ditto 57, ditto 39 ditto 35, ditto 101, ditto 96, ditto 86, ditto 58, ditto 44, ditto 71, ditto 70, ditto 67, ditto 66. —Berehaven 126, ditto 123, ditto 105, ditto 77.—Ballymurtagh 47, ditto 44, ditto 3.—Ballygahan 55, ditto 2.—Gurtnadyne 32.—Shallee 10.—Kanmantoo 17.—Burra Burra 7. —Total quantity of ore to be sold 1738 tons.

NOTICES TO CORRESPONDENTS.

*** We must impress upon our correspondents, the necessity of invariably furnishing us with their names and addresses—not that their communications should, consequently, be noticed, but as an earnest to us of their good faith.

"An old Subscriber" (Bristol).—We greatly regret the inconvenience to which our correspondent (together with numerous others) is put by the recent absurd postal alterations; but which we have reason to think, from the almost universal condemnation expressed, will soon be abrogated. In the meantime, we believe the Journal may be obtained, on the Monday morning, through some local agent—the time of our publication permitting papers being dispatched by the mid-day trains on Saturday.

"A Miner" (Manchester).—Read the descriptive paper on "the Cost-book System and the Stannaries," in the Journal of the 27th April last, and obtain our "Glossary of English and Foreign Mining and Smelting Terms," which can be procured through any bookseller.

A correspondent wishes for information respecting the Chesterfield (Virginia) Mining Company. Perhaps some of our readers will oblige by communicating what they may know of the property: Sir W. P. Call, Marten, and Co., were the bankers.

Exposition of Industry of all Nations for 1851.—We have received a long communication from a correspondent, "B. K.," on the proposed site of the building contemplated to be erected—want of space compels us to decline the insertion of our correspondent's letter. He proposes, as the most eligible spot, and where free and easy access can readily be obtained—the Copenahgen Fields, near Islington. This being in the proximity of the Great Northern line, which runs through a considerable portion of the manufacturing districts; the East and West India Dock Railway, which affords considerable facilities from the river, and the London and North Western, the situation is more central, taking into consideration the accommodation and general convenience to be afforded, than any other of the various sites proposed. The Commissioners have, no doubt, however, decided on retaining, if possible, the Hyde Park site; and whatever advantages may be reaped from our correspondent's suggestions, we are afraid he is too late in the field to render them of any practical benefit, either to himself or the public. His remarks, as to the jobbing to be feared, are not to the present purpose; although no direct control is placed over the Commissioners, and the several committees, yet all their movements are watched with a jealous eye by the public, and every action is liable to its scrutiny and animadversion; in such case, although some errors of judgment may be committed, there is scarcely any body of men so fool-hardy as to lend themselves to the flagrant abuses anticipated by "B. K."

E. Harries (Gloucester-place).—The general complaint of the insecurity of Westminster Bridge has been universally acknowledged, and it is believed some decisive steps must immediately be taken to remedy this evil, with as little obstruction and inconvenience to the public as possible. Various plans of bridges have been proposed, but as yet none have been decided upon. It would seem that the erection of a stone bridge would take considerable time, would impede the traffic of the river, and could not be commenced before the old structure was demolished. Others have suggested a suspension bridge, similar to Hungerford, but as there is a great traffic over the present bridge, which most probably will increase rather than diminish, however safe the principle may be, the catastrophes which have occurred at Yarmouth, Anglers, &c., render the public mind wary and doubtful of their security. Some time since, one of our correspondents, Mr. Motley, prepared a sketch of an iron bridge, to be built in the Gothic style, which would have been an ornament to the river, and in consonance with the new palace at Westminster. As this would have been one of the grand approaches to this fine building, its similarity of architecture would have greatly improved the general aspect. We need not inform our correspondent that iron bridges are not only more economical, but that they can be erected in a briefer space of time than those of stone.

The Electric Telegraph.—Some highly original and very great improvements are in progress in the needle telegraph, by a gentleman altogether unconnected with the present company, the particulars of which we shall soon have an opportunity of laying before our readers.

"W. M." (Greenwich).—The first diamond lens for microscopic purposes was formed by Mr. Pritchard, at the suggestion of Dr. Goring, in 1824, and the first diamond microscope was completed in 1826. The introduction of this brilliant stone for such a purpose is regarded as realising almost the ultimatum of perfection in the construction of the single microscope. Its great advantages arise from its high refractive power and feeble tendency to the dispersion of colour. The hint upon which this optical improvement is founded was originally thrown out by Dr. Brewster, in his *Treatise on New Philosophical Instruments*, page 402. The sapphire lens is almost equal in refractive power and clearness to that formed of the diamond; and this has also been constructed by Mr. Pritchard of various focal lengths, and fitted to the microscope with excellent effect.

"B." (Islington).—The result of the trial in the case Dakin *v.* Brown was, that the defendant declined proceeding further with the action after the first day, agreeing to pay 800*l.* damages, and all costs.

Sale of Black Tin from Drake Walls Mine.—In last week's Journal it was stated that the second parcel produced 37*l.* 5s.; it should have been, 38*l.* per ton.

"M." (Regent's-park).—By a notice in another column, it will be seen that Mr. Polkinghorne's "Synopsis of the Cornwall and Swansea Ticketings" has been published.—Copies can be had at our office, price 7s. 6d. each.

"A Reader" (Leeds).—We hope for a favourable result to Mr. Locke's motion, to rescind the alteration. Forward a copy of the petition we inserted last week, for presentation.

"W." (Bolton).—In answer to our correspondent's inquiry respecting the cause "The Electric Telegraph Company *v.* Chapman," we understand that the plaintiffs have adopted measures to defer the trial until December next; and we are also informed that similar measures have been taken with regard to the second action brought by the same parties against Brett and Little, and which, as we intimated to our readers in our last number, was to have come on in the Court of Common Pleas on Saturday last.

"A regular Subscriber."—We know of no other means of redress, than for the London shareholders to unite, call a meeting, and appoint a committee to institute legal proceedings against the purser or other parties to whom the money was paid, or are otherwise responsible.

South Wales Colliery Strike.—Mr. James Banfield, coal agent of Cardiff, referring to a statement in the *Times*, that "the strike is doing considerable mischief to this port, and that numerous vessels which have put in for cargoes have sailed out empty," says—"The statement, so far as Cardiff is concerned, is entirely erroneous. The Glamorganshire collieries you name are situated in the lower part of the county, and ship all their produce from lower ports; the Monmouthshire entirely through Newport. All the collieries supplying this port are in work; the difficulty is to obtain vessels, there is no want of freight. As such a statement is calculated to mislead shipowners, and masters of vessels, and consumers also, will you be good enough to insert this letter in your columns?"

Carvannall Mine.—Mr. Francis Passingham (Truro) informs mine brokers and the public generally, that he is entitled to 14-132d shares in the Carvannell Mine, Gwennap, Cornwall, and that he repudiates the transfer thereof obtained from him by Capt W. Martin, the principal agent in the mine. And he further gives notice, that he has, through his solicitor, called on the said William Martin to reinstate the shares in his name in the Cost-book of the mine; and that he has also given written notice to the purser of the mine not to accept or enter in the books of the said mine the transfer of any shares standing in the name of the said William Martin. And he further gives notice, that proceedings in Chancery will forthwith be instituted against William Martin, to compel him to restore the said shares as aforesaid, and for an injunction to restrain him from disposing of such shares; and also to restrain the purser from transferring any of the shares now standing in the name of the said William Martin in the Cost-book of the said mine, unless such shares are reinstated in his name as aforesaid.

"A Manchester Reader."—We are obliged for the communication. The Roche Rock Tin Mine is in the parish of Roche, near St. Austell—the offices in Royal Exchange-buildings, London; and the Rocks Mine is the adjoining sett—the offices in Manchester.

The Tungkillo Mine (20,000 acres) is situated about 35 miles south-east of Adelaide, South Australia.

Sewage Manure.—We have received the communication of our respected correspondent, Mr. T. H. Leighton, on the London sewage question, and on which subject a leading article appears in our present Journal; but the question has undergone so much discussion, and so little good appears to us to be likely to arise from its revival in our columns, that we must decline its insertion.

The communication of "A Tributer" (Liskeard) is declined.

"A Subscriber" (Cornhill).—We cannot insert the long statement respecting the recent trial "Knight *v.* Pace." We consider the affair to have been settled by the verdict of the jury, and we cannot open our columns to a discussion, which can have no beneficial termination. It was remarked by Mr. Sergeant Shee, "that it was very remarkable that Powell Davies, much as he was 'disgusted' with the defendant Kelly, did not object to take the money on the bill from the plaintiffs. If he, who so glibly at the last moment said that the iron merchants, as he first called the defendants, were wine dealers, stated for his own end that Pace recognised his liability in the conversation he detailed about the wine—was he to be believed?"

Court Grange Mining Company.—In the accounts of this company, page 305, in last week's Journal, 6 lines from top, for "140," read "410" shares; 27 lines from top, for "vendor," read "powder" (66*l.* 18s. 3d.); and 32 lines from top, for "246*l.* 16s. 10d.," read "240*l.* 16s. 10d.:" and for "346*l.* 16s. 10d.," read "340*l.* 16s. 10d."

*** It is particularly requested that all communications may be addressed—

To the Editor,
Mining Journal Office,
26, Fleet-street, London.

And Post-office orders made payable to Wm. Salmon Mansell, as acting for the proprietors.

THE MINING JOURNAL
Railway and Commercial Gazette.

LONDON, JULY 6, 1850.

The Mining Journal is published at about Eleven o'clock on Saturday morning, at the office, 26, Fleet-street, and can be obtained, before Twelve, of all news agents, at the Royal Exchange, and other parts of London.

In the truly arduous occupation followed by the Cornish miner, there is no portion of his daily toil which so severely taxes his vital strength, and tries his constitution, as the descending and ascending the deep shafts to his work, particularly the latter. To descend to a depth of from 1000 to 1800 ft. on nearly perpendicular ladders, is sufficiently severe, and the men are even then obliged to rest themselves for a considerable time before they can commence their labour; but day succeeding day, after eight or nine hours' excessive toil, in a heated, moist, and oppressive atmosphere, to *ascend* to such a height, is a feat which makes inroads on the strength and health of the most robust, and tends materially to shorten the lives of the mining population. Many years ago, measures were taken in the deep mines of the Hartz, and other parts of Germany, to relieve the men from this addition to their toil, and machines were constructed at once simple but powerful, which by an oscillating vertical motion of two sets of rods, with steps or platforms at regular distances, enabled the men to ascend or descend with great rapidity, and without the slightest fatigue. The attention of the adventurers in our Cornish mines had long been called to this important and humane subject, but it was not until some eight or ten years since that any steps were taken to test the superiority of motive-power, for the transit of the men, over fixed ladders. The proprietors of the Tresavean Mine were at length induced to consent to the erection of a man-engine, which has proved not only highly advantageous as regards the preservation of life, but, by effecting an immense saving of time, enables much more labour to be performed by each man, to the benefit of the adventure.

It is with much pleasure we find that the proprietors of Fowey Consols Mine are about to follow this humane and desirable course. At a meeting, held on the 18th June, it was resolved—"That, as this mine is become so very deep and hot for the miners' working, and thereby very injurious to their constitutions in climbing, after doing a fair day's work, we consider it imperative, in order to continue the working of the mine, that the miners should be drawn up after their day's work is finished." This determination to adopt measures for the preservation of the working miner, more strongly evinces a humane and liberal spirit under present circumstances, inasmuch as, during the past five years, the expenses of the mine have amounted to 204,814*l.*, and only one dividend of 2*l.* per share has been paid; while the lords have received no less a sum than 8126*l.* The only proviso attached to this resolution is, that the latter shall allow out of their future dues 5*l.* per cent. per annum on 2000*l.* towards the outlay. To this liberal proposition, we should hope and believe there will not be a dissentient voice; and, when completed, we trust it will be another such convincing proof of the benefits arising from the use of the man-engine, both to miners and adventurers, as will induce other proprietors of deep mines to follow so laudable an example.

On a cursory review of the various institutions in the metropolis for the acquirement of knowledge, and the encouragement of literature and science, it might be considered that our means of mental edification were ample, and that nothing was left to be desired to advance the enlightenment of the age, and to supply that intellectual food for which the very sinews of society—the middle and working classes—so ardently long. Such, however, is really not the case; and, on an impartial scrutiny, we shall find that, with the exception of the Polytechnic Institution (an establishment which may be considered a really national one), we have nothing on a grand scale, forming, as it were, a national theatre of the industrial arts, and where the various sciences may be studied, and the fine arts practised, with facility and success. In the Mining Journal of 23d Feb. last, we made some remarks on a prospectus, then just issued, for the establishment of an institution to complete this desideratum—to erect a building, to be called the Royal Panopticon of Science and Art; and, although no outward stir has been made during the period which has elapsed, we are happy to find that the company has been in progress; and its success, we trust, is now certain. When we find the presidenciary chair filled by the heir to the first dukedom in the kingdom (the Earl of Arundel and Surrey), and the society patronised by the most scientific and influential among the nobility and gentry, we have every reason to believe a foundation will be established on principles of that enlarged, liberal, and enlightened nature as will meet the requirements of the times; and, while the institution will be held up to the world as greatly superior to all others in an extended field of usefulness, an income will be secured, which will amply repay the shareholders for the capital invested. We refer to an advertisement, and some further observations, in our last Number.

The attention of Parliament and the public is now anxiously rivetted upon the proceedings of that notable establishment, the Commissioners of Sewers. The last commission were superseded because they did not possess engineering talent—they were tardy in their movements, and they were divided in their counsels regarding the proper course to take as a general system; they, therefore, most honestly and wisely issued an invitation to the engineering talent of the country to volunteer plans and specifications for the effectual drainage and sewerage of the metropolis, promising that the most liberal acknowledgement would be awarded to those plans possessing merit, and that the names of the individuals should be brought forward as their plans deserved. Immediately after this event, they were superseded, but the desired effect was produced by the volunteering of 170 plans and specifications, which fell to the heirship of their successors. These gentlemen were selected for their great engineering talents, some civil, some military, some mining, and so, with Lord Ebrington at their head, the public was assured that the City and its dependances would be, *tout suite*, cleansed and remodelled upon the most effective system. Let us now take a hasty glance at their proceedings since the time of their entering office.

The first important act was the appointing, as engineer, the nominee of Mr. Stephenson, with a salary of 1500*l.* per annum. The next great act was the imposition of a rate of 8d. in 1*l.* They were not long in telling the public that, as they were unpaid, their time must not be demanded too urgently; and, therefore, many of their weekly meetings failed in producing a quorum to transact business. Finding that the publication of the plans which had been advertised for, in common justice, demanded attention, they censured their predecessors for having taken that step, as it now clearly bound them to take some decisive course; they, therefore, appointed a special committee to examine, classify, and select these plans, according to their practical merit. In accomplishing this task the projects were classified into schemes applicable to the present sewerages, and discharging at the Thames, as at present; and other schemes, consisting of stupendous new tunnels, of many miles in length, having their termini far below London; others, again, were for converting the produce into manure. Now, the extraordinary result of this classification was as follows:—They place five of the most stupendous at the head of the list, that of Mr. M'Clean standing **A 1.**

It will naturally be imagined that they, the commissioners, having selected this plan of M'Clean and its four brethren as possessing the most practical and comprehensive merits, they were prepared to adopt their principles, and so proceed at once with their mission; no such thing! No sooner did they finish their laudations of the designs, than they declare that they are so wanting in practical detail, so dreadfully costly, so deficient in general comprehension, that they, the commissioners, declare they cannot adopt them; and, by a singular train of argument, they also conclude that the other plans, 160 in number, are so common place, that their tendency is to defile the Thames; and, in short, that although various of them possess merit, yet it is not such as to demand any favourable expression from the commission; but, as a sop to these originators, it has been often admitted that they have got some valuable hints from them. Therefore, having thus summarily discharged so much for the claims to notice of these individuals, we will now endeavour to follow the devious course of these commissioners, as deduced, from time to time, from the *Times*, and the anxious enquiries of the City Members in Parliament.

The only grand move which they seem to have entered upon is a new sewer at Westminster—to accomplish which an engine must be erected in Palace-yard; but whether to pump up sewerage, or mixed water, is by no means clear; nor is it clear that the result of this operation, which is to cost 30,000*l.*, is any other than an amended sewer to discharge into the Thames, as heretofore. But how it is to be cleansed in dry weather, or in what great degree it is to amend the present state of things, seems anything but clearly understood;—suffice it to say, that this engine is to operate by forcing the produce up to some higher altitude; but still, when finished, where is this sewer to discharge? Surely, operations like these could not demand such an excess of engineering knowledge as have been arrayed; at any rate, their accumulated talent, aided, according to their own admission, by valuable hints contained in the published projects, should ere this have produced some clear, grand, practical, and comprehensive mode of operating upon the sewerage; whilst, on the contrary, they admit that the mode of dealing with the north side of the Thames has never yet been agreed upon by them. They say they have hit upon an expedient for managing the south side, whereby, in the course of time, not a single sewer will discharge into the Thames between Battersea-bridge and Deptford. But *what this is to cost, how it is to be performed, what length of time it is to require, or whose system it is*, are particulars which it is not becoming of the public to know; and, as for the north side of the river, their cogitations have never yet embraced any system applicable to this, the chief portion of the metropolis.

Such is the present position of the sewerage management, and such also is the position of its twin sister—the sanitary commission. Up to this period, how little is done, or how small is the prospect of any *active, practical, sound, comprehensive system being carried out?* Notwithstanding the disregard which has been shown to the suggesters of plans, surely, surely, some or other of the schemes possessed enough of merit to be adopted forthwith in cleansing or modifying the present evils, rather than this do-nothing policy, which awaits the determination as to plans so vast and costly, as will, if ever completed, require many years, and dreadful expenditure, to compass. And what a dreadful event a return of the cholera would be under such circumstances, without a single alleviation of past evils, with crude plans and unmatured ideas? Of what avail are high talents in such a commission, where it is notorious that the individuals are all so lucratively employed elsewhere, that it is folly to suppose that they are going to wade through the drudgery of the necessary attendances to work such a commission effectively? The making of speeches, and the parrying of parliamentary questions, may do for a little; but, if the cholera appears, great will be the responsibility and the dishonour attendant upon an office which taxes the people, and gives them nothing in return but false hopes and disappointment. The truth is, that the commissioners should be practical persons, fewer in number, and paid for devoting their time and talent to such an onerous work—viz.: the expenditure of 100,000*l.* per annum in ordinary, and, if some of the grand schemes are to be pursued, to a very much greater amount. It is, therefore, high time that the commission should publish a clear and intelligible specification of what they are going to do, that the public may, before it is too late, appreciate the merits of what they are to be heavily taxed for accomplishing.

COLLIERS' STRIKE IN MONMOUTHSHIRE.

[FROM A CORRESPONDENT.]

The present strike is now virtually at an end; nearly all the colliers have resumed work at the reduction of 2d. per ton, as first proposed by the masters; in some cases, however, where the men had left work without notice, the masters insist on a further reduction. Sir J. Phillips, who is a kind and liberal employer, was so much annoyed by the conduct of his men, as to insist upon a reduction of 5d. per ton, and his colliers have resumed work at this rate. Some of the political schemers who incited the men to this turn-out, are now studying political economy on the tread mill at Usk, and others have abandoned their agitation for the present. Their dupes, the honest workmen, whose true friends we have always been, and always shall continue, we sincerely pity and sympathise with. Five or six weeks' idleness is a serious injury to an industrious workman with a large family, and often necessitates many months of privation and hard labour to save enough to pay off the debts incurred during a strike. Combinations of masters or men, to regulate the price of labour, have never been permanently successful, and are alike injurious to those who promote such unions and to society at large.

MINERS' STRIKE IN NORTH WALES.

[FROM A CORRESPONDENT.]

I have been informed, by some of the men themselves, that most of the stand-out miners latterly employed in the Milwr Mines have agreed to sign the rules for eight hours' working to-morrow, and that the agents have agreed to put themselves in communication with the committee of management, and to set the bargains again on the earlist day after their sanction to do so; the great objections to the rules appear to be in clauses 1 and 18, the former preventing one-half the day to be employed in annual bargains, and the 18th, from being prohibited from working them at all. In order to make it more clear, I send you a copy of the rules, one of which is held by each workman, and which it may be proper to publish. The stand-outs to the north of Holywell, although idle for more than two months, have not as yet agreed to the rules—at least, I have not heard of any settlement.—*July 2.*

1. Every person who takes a bargain will be required to work it regularly—that is to say, each person shall work eight hours every day in his respective bargain, where the agents may think right, and the air is good, and not to leave his place of work until he be relieved by his comrades; and every person who neglects or refuses to relieve or meet his comrades in his place of work, at the time required, shall be fined 2s. 6d.; and, should he repeat it, will be liable to be excluded these mines.

2. That one person from each bargain shall attend at the counting-house, at or before six o'clock on each Monday morning through the taking, to take such materials as may be wanted for the ensuing week; and no materials will be delievered at any other time.

3. That all levels be carried 6 feet high, and 3 feet wide, within timber, where the sezi is not otherwise named, and be properly secured, where timber may be required (lairies or openings, and deads in driving, and lairies or opening in clearing, excepted).

4. All persons working on ore, shall work their ground in a proper manner, agreeably to the agents' directions, and leave open every part of the ground, on the direction of the vein, for examination against the setting day. Should the agents discover, after setting day, that any ground was concealed, the taker will no longer have any claim to his bargain, and the taker and his partners shall be excluded these mines for six months for the first offence; for the second to be excluded these mines for ever, and forfeit all their ores, sold or unsold, to the proprietors of these mines.

5. Every person taking a bargain shall produce his full number of men at the time of setting, or the bargain shall be offered to others.

6. Every pare or company of men taking a bargain, whether on tutwork or tribute, provided the price be less than 4*l.* 10s. per ton, shall be obliged to work the bargain regularly the whole taking; or, should they think proper to give up their bargain, shall forfeit 10s. 6d. each man, and all work then done.

7. Any person coming into the mine disguised by liquor shall forfeit 5s.

8. That one-half of all the expense of dressing the ores be paid by the taker, or the men to whom the ores belong, provided their tribute be less than 2*l.* per ton; but, should their tribute be 2*l.* and upwards, the taker, or the men to whom the ores belong, shall pay the full expense of dressing, the fair value of which shall be settled by the agent and washers.

9. Any tributer or tributers known to adventure in any other pitch but his or their own in these mines, shall forfeit all ores in such pitches he or they may be concerned in.

10. Every person having a new wheelbarrow shall pay 10s. for it. All wheelbarrows requiring repairs shall be repaired at the expense of these mines. Barrows may be delivered up at the end of each bargain, and allowed for at the agents' valuation.

11. Any man known to take ore from another person, shall forfeit to the proprietors of these mines all his ores and property due to him at the time of detection, and be at once excluded these mines.

12. Every taker is required to clear his bargain of ore and deads at the end of each taking. Should he neglect or refuse to do so, he will be fined in proportion to the damage done.

13. Any person cutting timber, without first obtaining liberty from the agent, will be fined 1*l.* 1s.

14. Any person taking away timber, or wood, for the purpose of fuel or otherwise, will be prosecuted as the law directs.

15. Any person using uncivil language to any one of the agents, will be immediately excluded these mines.

16. All bargains, at the time of setting, will be free or open for any one to offer for.

17. Any person taking a bargain in any other mine, more than three days before his bargain has expired in these mines, will be liable to forfeit all work done in these mines.

18. Any person working an annual bargain who has, at the same time, a bargain in these mines, will be fined 5s., and should he persist in working it, after notice be given, will be excluded these mines for three months, and forfeit such portion of the work done in these mines as the agents may think reasonable.

19. Every person employed in these mines will be required to attend to capstan, or other required work, when wanted, or fined 2s. 6d. for such neglect.

20. Any person having stuff in the barrow-road, to the inconvenience of others, must draw it, when directed by the agents, or be liable to a fine, at the agents' discretion, provided it does not exceed 10s. for each stem, called eight hours, so neglected.

The Mining Districts.—The great majority of the colliers in the several districts, except that of Holytown, have now resumed their occupations, at the terms agreed upon, viz.—3s. 6d. of a daily wage. In that district, however, the state of matters is exactly the converse of what subsists elsewhere. In it the great majority of the hands are idle; only a few of the employers there have ceded the conditions sought for. Upwards of 2000 men, therefore, are still disengaged. In the Airdrie district there are only some 240 unemployed hands, while in the others the numbers are still fewer. Their organisation or union is still maintained, however, and they are desirous of improving it. By an arrangement come to, those who have succeeded in obtaining employment pledged themselves to contribute 6d. daily for the behoof of their less fortunate fellows. Last week there was an inclination evinced to infringe this regulation. The consequence was, that an aggregate meeting was summoned and most numerously attended, particularly by those for the benefit of whom the scheme was devised. Any breach of faith was denounced in the strongest terms. Their persuasions, importunities, and threats were effective, and a resolution was adopted promising a more strict compliance with the rule in future. We understand the miners in the Ayrshire and Falkirk districts—who were latter quitting their employment—have not yet been brought to accept any compromise. —*The Glasgow Daily Mail.*

STATISTICS OF COPPER, LEAD, AND TIN.

The second quarter of the current year having now expired, we proceed to our usual course of laying before the readers of the *Mining Journal* complete returns of the sales of copper ores by ticketing in Cornwall and at Swansea, and also those of lead and tin, to the utmost extent our supplies of information will enable us. In the latter metal an increase in the number of returns will be perceived, as compared with the last and previous quarters. The quantity of ores sold in Cornwall by public ticketing during the quarter ended 30th of June last was 39,680 tons, producing 3076¼ tons of fine copper, and money, 205,095*l.* 1s., at an average price of 5*l.* 3s. 4d. per ton, being, with an increase of 2072 tons of ore, and 101¾ tons fine copper, a decrease of 14s. 2d. per ton in price, and in the total amount 15,946*l.* 18s.; the relative returns being as follows:—

	Ore.	Fine copper.	Amount.	Av. price.
30th June, 1850 ..... *Tons*	39,680	3076¼	£ 205,095 1 0	£ 5 3 4
31st March, 1850	37,608	2974½	221,031 19 0	5 17 6
Increase	2072	In. 101¾	Dec. £ 15,946 18 0	Dec. 0 14 2

While, as compared with the corresponding quarter of the previous year, the results are as follows:—

	Ore.	Fine copper.	Amount.	Av. price.
30th June, 1850 . ....*Tons*	39,680	3076¼	£ 205,095 1 0	£ 5 3 4
30th June, 1849	36,631	2936¾	187.167 15 6	5 2 2
Increase	3049	169½	£ 17,937 5 6	£ 0 1 2

Showing, we think, the trade to be still in a sound and healthy state; and as the returns for the quarter ending March last were, as we stated in the *Mining Journal* of 6th April last, the best which we had given for *seven years*, showing a higher value for the ores than had been given since 1842, and exceeding the average of the past 17 years by 1s. 10d. per ton, we feel no alarm at the rather unsatisfactory view which the comparative depression in the returns, as compared with that quarter, presents.

The sales by ticketing at Swansea were as follows:—

	Ore.	Amount.	Av. price.
Quarter ending June 30, 1850.. *Tons*	11,290	£ 129,104 16 6	£ 11 8 8
„ March 31, 1850.....	8690	125,751 6 6	14 9 5
Increase	2600	£ 3,353 10 6	Dec. £ 3 0 9

Showing, with an increase of 3600 tons of ore, an advance of only 3353*l.*, being a falling off in the average price of the ore of 3*l.* 0s. 9d. per ton. As compared with the corresponding month of last year the result is—

	Ore.	Amount.	Av. price.
Quarter ending June 30, 1850.. *Tons*	11,290	£ 129,104 16 6	£ 11 8 8
„ „ 1849	14,925	206,206 8 0	13 16 4
Decrease	3635	£ 77,101 11 6	£ 2 7 8

A result calculated to allay all fear that, from the reduction of the duty, the influx of foreign ore would be so great as to swamp the British miner.

The above amount of Swansea sales were made up as follows:—

	Ore.	Amount.	Av. price.
Foreign ..... *Tons*	7085	£ 103,495 12 0	£ 14 12 2
Irish	3676	24,169 8 6	6 11 6
Welsh and sundries	529	1,439 16 0	2 14 5
Total.....	11,290	£ 129,104 16 6	£ 11 8 8

The above amount of foreign ores were made up as follows:—

	Ore.	Amount.	Av. price.
Cobre ..... *Tons*	4330	£ 62,389 9 0	£ 14 8 2
Cuba	1280	12,509 4 0	9 10 6
Copiapo	442	10,886 1 6	24 11 2
Australian.....	443	10,703 2 0	24 3 0
Santiago	408	4,945 1 6	12 2 4
Spanish	160	1,336 9 0	8 7 0
Chili	22	756 5 6	34 7 3
Total	7085	£ 103,495 12 0	£ 14 12 2

Showing an increase of 568 tons over the returns of last quarter, but a diminution in money returns of 7802*l.* 11s. 6d., and in the average price of the ores of 2*l.* 9s. 4d.

And the Irish as follows:—

	Ore.	Amount.	Av. price.
Berehaven ..... *Tons*	1929	£ 14,758 0 6	£ 7 13 0
Knockmahon	1465	7,825 5 6	5 6 9
Lackamore	65	583 2 0	9 0 0
Ballymurtagh	146	413 19 0	2 15 4
Gurtnadyne	63	341 1 6	5 8 0
Cronebane.....	4	124 0 0	31 0 0
Tigrony	4	124 0 0	31 0 0
Total	3676	£ 24,169 8 6	£ 6 11 6

This return from the mines of Ireland is highly gratifying, as showing an increase of 1875 tons, and 10,346*l.* 19s. 6d. in money, or more than double the ores sold during the previons quarter, the latter having been 1801 tons, and 13,822*l.* 9s.

The above quantity of copper ores were purchased by the smelting companies, as follows:—

Companies.	CORNWALL.				SWANSEA.				TOTAL.			
	Tons	£.	s.	d.	*Tons*	£	s.	d.	*Tons*	£.	s.	d.
English Cop. Co.	—	—			846	9,357	5	6	846	9,357	5	6
Mines Royal	2707	15,702	9	3	416	6,177	1	3	3213	21,879	10	6
Vivian & Sons....	8612	43,272	8	11	2328	26,126	3	0	10940	69,398	11	11
Freeman & Co..	4656	24,542	14	6	613	4,586	13	6	5269	29,129	8	0
Grenfell and Sons	5964	28,535	2	4	1977	19,699	11	3	7941	48,334	13	7
Crown Copper Co.	122	813	6	11	—	—			122	813	6	11
Sims and Co....	5319	25,738	18	0	1309	13,969	4	9	6628	39,708	2	9
Williams and Co.	9929	55,300	2	5	3198	38,403	2	3	13127	93,703	4	8
Schneider and Co.	2281	11,089	18	8	370	6,557	3	0	2651	17,647	1	8
Mason and Co. ..	—	—			233	4,228	12	0	233	4,228	12	0
	39680	205,095	1	0	11290	129,104	16	6	50970	334,199	17	6

PRODUCE OF THE PRINCIPAL COPPER MINES OF CORNWALL,
FOR THE QUARTER ENDED JUNE 30, 1850.

Mines.	*Ticketings.*	*Tons.*	*Amount.*	*Av. Price.*
Devon Great Consols	3	4175	£25993 4 0	£6 4 3
Carn Brea.....	3	2380	14055 17 6	5 19 0
United Mines.....	3	2911	12592 16 0	4 6 6
Par Consols	6	1978	11049 16 0	5 11 8
Fowey Consols	6	1603	9549 18 6	5 19 0
West Caradon	3	1041	8264 7 3	7 18 9
Great Consolidated	2	1415	7533 3 0	5 6 6
Wheal Basset	3	1095	7474 17 6	6 16 6
Wheal Seton and Pendarves	3	1574	7292 5 6	4 12 8
Tywarnhale and Nancekuke.....	3	1850	6480 15 0	3 10 0
Tincroft	3	1810	6795 16 6	3 8 6
North Pool.....	3	1715	6121 17 0	3 11 4
Wheal Buller	3	810	5575 19 0	6 17 6
Camborne Vean and Wh. Francis..	2	1169	5354 4 6	4 11 8
South Wheal Frances	3	702	5174 14 0	7 7 5
East Wh. Crofty, Dudnance, and Longclose	2	1159	4885 3 0	4 2 7
Wheal Friendship	4	685	4749 16 6	7 0 0
North Roskear	3	860	4587 19 0	5 6 8
Treviskey	1	511	3629 15 0	7 2 0
South Caradon	2	512	3556 12 0	7 0 0
Levant	3	726	3541 6 0	4 17 6
West Wheal Treasury.....	3	433	3145 9 6	7 5 3
Phœnix	2	200	2478 15 0	12 7 10
Bedford United.....	3	358	2343 19 6	6 11 0
Condurrow	2	525	2148 1 0	4 1 10
Tresavean	3	697	2054 2 6	3 0 0
Dolcoath	2	485	1994 5 2	4 2 3
Wellington	2	321	1861 4 0	5 16 0
Alfred Consols	3	215	1731 16 6	8 1 1
Wheal Mary	3	388	1511 1 0	3 18 0
Marke Valley	2	529	1494 16 6	2 16 6
South Tolgus.....	1	183	1387 16 0	7 11 8
Perran St. George	1	316	1368 8 0	4 6 5
Wheal Agar	3	298	1337 2 6	4 10 0
East Pool	2	470	1309 11 0	2 15 4
Wheal Tremayne.....	3	238	1243 4 0	5 6 6
Holmbush.....	2	254	1232 7 0	4 18 0
Treleigh	3	260	1109 8 0	4 0 0
West Wheal Seton	2	221	1088 12 6	4 18 6
Wheal Comfort	3	583	1033 5 6	1 15 5
West Fowey Consols	2	166	936 9 0	5 12 9
Poldice	1	172	836 18 6	4 17 4
South Wheal Fortune.....	2	104	636 11 0	6 2 6
West Wheal Jewel	2	134	481 8 6	3 11 9
Trethellan.....	1	171	450 7 6	2 13 8
Wheal Henry	1	85	442 5 0	5 4 0
Charlestown	1	97	419 18 0	4 10 9
Wheal Ellen	1	60	374 2 0	6 4 8
Wheal Vyvyan	1	94	330 17 6	3 10 5
Wheal Pink	2	84	329 12 6	3 18 6
Gonamena	1	30	269 5 0	8 19 4
South Crinnis	1	37	208 2 6	5 12 5
West Trethellan	2	76	200 14 0	2 13 0
Botallack	1	24	159 19 0	6 15 0
Polberrow	1	13	152 8 6	11 13 10
Prideaux Wood.....	1	32	148 0 0	4 12 6
Wheal Maiden	1	35	142 6 0	4 1 6
Pendarves Consols ..	1	30	133 10 0	4 9 0
Wheal Busy	1	42	133 7 0	3 3 4
Herland.....	1	25	124 11 6	5 0 0
Carthew Consols	1	19	120 13 0	6 6 4
Wheal Banns.....	1	20	105 0 0	5 5 0
St. Aubyn and Grylls.....	1	22	97 3 0	4 8 4
Wheal Clifford	1	19	93 2 0	4 18 0
Copper Bottom.....	1	31	91 9 0	2 19 0
Polgooth.....	1	18	87 6 0	4 17 0
Wheal Penhale	1	14	66 17 0	4 15 6
Wheal Jewel.....	1	14	64 17 0	4 12 8
East Wheal Treasury	1	10	49 0 0	4 18 0
Wheal Prosper	1	10	45 10 0	4 11 0
Creeg Braws.....	1	9	39 7 6	4 7 6
Grambler and St. Aubyn	1	16	38 16 0	2 8 6
Pemberthy Crofts	1	6	32 5 0	5 7 6
Trannack	1	5	28 10 0	5 14 0
Wheal Harmony	1	5	25 7 6	5 1 6
Wheal Squire	1	4	25 6 0	6 6 6
East Crinnis	1	3	21 15 0	7 5 0
Wheal Union.....	1	4	20 12 0	5 3 0
Godolphin	1	9	14 16 6	1 12 6
Tresize	1	12	13 10 0	1 2 6
Lanarth	1	5	12 17 6	2 11 6
North Godolphin	1	5	11 5 0	2 5 0
Pembroke	1	1	6 10 0	6 10 0
Wheal Gewans	1	1	3 8 0	3 8 0
Sundry ores and slags.....	2	33	52 11 6	1 11 10
Total ..... *Tons*	39,680		£205,095 1 0	£5 3 4

LEAD.

In the returns of the sales of Lead Ores there is an increase, as compared with the last quarter, of 1327 tons, and money 16,824*l.* 9s.; the quantity for the quarter just ended having been 9913 tons, and 132,453*l.* 6s., and for that ended March 31, 8586 tons, and 115,628*l.* 17s. 3d. This quantity is the produce of the following 63 mines, being 10 additional to our last returns:—

	Tons.	*Amount.*
East Wheal Rose	1129	£16126 14 6
Lisburne Mines.....	880	10379 9 0
Wheal Mary Ann.....	486	7902 11 6
Trelawny	419	6630 15 6
Tamar	257	5236 5 6
Fronfownog	463	5190 11 6
Laxey	200	4112 10 0
Maes-y-safn	345	3870 0 0
Hendre	295	3458 14 0
Foxdale	280	3457 5 0
Newtonards	300	3295 0 0
Goginan	285	4741 17 0
Maesyrerwddu.....	266	3166 7 3
Talacre	140	3122 5 0
Herodsfoot.....	220	3086 5 0
Deep Level	266	3025 6 0
East and West Shallee	180	2906 19 0
Machynlleth.....	243	2746 10 6
Bwlch Consols	175	2642 7 6
Westminster	218	2512 4 0
Jamaica	200	2437 0 0
Cwmystwith	220	2425 5 0
Callington	127	2384 6 6
Trehane	131	2311 14 6
Pen-yr-henblas.....	189	2194 19 0
Llock Mine	150	1875 0 0
Cairnsmore	169	1706 0 0
South Tamar.....	72	1387 16 0
Coetia Llys	103	1342 1 0
Black Craig	108	1152 10 6
Pantymwyn	90	1046 10 0
East Tamar	70	1036 0 0
Belgraves	90	1026 0 0
Conlig.....	101	1024 11 0
Great Wheal Baddern.....	60	826 7 0
Linares.....	70	782 5 0
South Australia	60	780 0 0
Milwr	58	721 10 0
Court Grange	38	576 11 6
Nanteos	54	560 0 0
Rhoswiddol	52	555 0 0
Cacconroy.....	40	550 0 0
Holmbush	30	482 5 0
Wheal Golden	36	477 0 0
Bryn-Arian	40	476 0 0
Wheal Adams	50	442 10 0
Llwynmalees.....	280	410 5 0
Dumbarton	35	375 7 6
Keswick	21	226 13 6
Eagle Rock	20	225 0 0
Pant Ddu	23	210 16 6
Pantyffrith	16	200 18 0
Bryntail	16	181 4 0
Arklow	18	148 15 0
Tregorden	5	145 7 6
Cwm Erfin.....	12	136 16 0
Rhiwerth	6	109 10 0
Penrhiw	13	98 15 0
Bantry	8	87 1 3
Aberduna	7	74 4 0
Grogwinnon	5	51 3 9
Dyfngwm	5	50 12 0
Parys Mine	2	20 0 0
Total ..... *Tons*	9913	£132,453 6 0

The above ores were purchased by the following smelting companies:—

Companies.	Tons.	Amount.
Walker, Parker, and Co.....	3414	£41,126 4 9
Newton, Keates, and Co.....	1557	19,745 18 0
Tamar Smelting Company	807	12,318 4 6
R. Michell and Son	682	9,841 4 0
T. Somers	577	9,938 12 9
Pontifex and Co.	468	8,223 13 0
Locke and Co.	457	7,199 11 3
Sims, Williams, and Co.	499	6,365 13 9
Mather and Co.....	495	5,772 6 6
Meredith (Executor of J. T. Treffry).....	234	3,747 5 0
Combmartin Smelting Company	238	3,363 7 6
Panther Smelting Company	240	3,182 5 0
J. P. Eyton.....	80	916 13 0
Penpoll Company	55	712 17 0
Total.....	9913	£ 132,453 6 0

TIN.

We have repeatedly observed on the very few returns of the sales of this metallic produce which it is possible to obtain; we do, however, show off a little better on the present than on former occasions, presenting an increase of five in the number of mines over last quarter, 98 tons 1 cwt. 1 qr. 3 lbs. of black tin, and 1832*l.* 2s. in money. The following is what we have been able to obtain:—

Mines.	Tons c.	q.	lbs.	Amount.
Polberrow	82 15	0	0	£3348 18 2
Lewis Mines.....	50 0	0	0	2275 8 9
Great Polgooth	38 0	0	0	1656 18 9
Drake Walls.....	39 5	0	0	1575 12 6
Tincroft.....	35 0	0	0	1365 0 0
East Crowndale	25 0	0	0	954 10 0
Plymouth Wheal Yeoland	9 10	0	0	431 17 6
Birch Tor	7 15	0	0	345 5 8
Wheal Anderton	6 10	0	0	298 7 6
Mineral Court	5 15	3	7	280 4 9
Heigneton Down Consols	11 0	0	0	256 0 0
South Friendship Wheal Anne	3 3	0	0	119 0 2
Total	313 13	3	7	£ 12,907 3 9

Which were purchased by the smelting companies as follows:—

Companies.	Tons c.	q.	lbs.	Amount.
Williams, Foster, and Co.....	71 18	3	13	£3115 17 6
Calenick Company.....	78 19	3	19	3003 2 8
Daubuz and Co.	61 11	1	15	2621 3 5
Bisso Company	50 2	3	0	2023 8 0
J. H. Enthoven and Co.	37 0	1	0	1520 17 2
Bolitho and Co.	9 10	0	0	422 10 0
Union Smelting Company	4 10	0	0	200 5 0
Total	313 13	3	7	£ 12,907 3 9

SYNOPSIS OF THE CORNISH AND SWANSEA TICKETINGS.

In the *Mining Journal* of 6th October last, we inserted a notice of this compilation, by Mr. William Polkinghorne, of Fowey Consols Mine—a paper on which was read at the last meeting of the Polytechnic Society; and we have now received a copy, lithographed on a large sheet of drawing paper, 40 by 27 in., canvassed and varnished in the best style.* It is a highly interesting document to all connected with the copper trade and Cornish mining; and from it we learn that the standard from 1800 to 1848 averages 115*l.* 9s.; produce being 8¼. The total quantity of copper ore sold was 5,334,969 tons, averaging 108,877 tons per annum; the total quantity of fine copper was 432,665 tons, averaging 8829 tons per annum. The highest standard, on an average of 12 months, was in 1805, when it reached 169*l.*, on a produce of 7⅞; the lowest, excepting 97*l.* 7s. in 1848, was 98*l.* 13s. in 1816. The highest produce was 10*l.* in 1808—the standard being only 100*l.* 7s.; and the lowest produce was in 1842, 7 9/16ths; the standard being 120*l.* 16s., which was the highest average standard obtained for 23 years. The standard at Swansea, from 1815 to 1848, averages about 103*l.* 15s. on a produce of 12¼. The total quantity of copper ores sold was 873,658 tons, averaging 25,696 tons per annum. The total amount realised was 10,011,685*l.*, averaging 294,461*l.* per annum. The highest standard, on an average of 12 months, was in 1819, 134*l.* 6s., and the lowest, 87*l.* 2s., in 1845. The highest produce was in 1841, 17 3/16ths; and the lowest produce, 8¼, in 1828. The largest quantity sold in one year was 65,520 tons, in 1844, averaging 5460 tons per calender month; and in this year the amount was larger than ever obtained—882,568*l.*, or 73,547*l.* per month, producing the largest amount of fine copper, 11,107 tons. The smallest quantity sold was 287 tons in 1815, or 24 tons per month, realising 4089*l.*, or 341*l.* per month, producing 39 tons of copper—a curious contrast with 1844. The following tables of six years' averages are interesting:—

CORNWALL.

Periods six years.	Av. Stand. £	s.	Av. Prod. p. cent.	Ores Sold. Tons.	Price. £	s.	d.	Amount. £	Fine Cop. Tons.
1801 to 1806..	132	8	8¾	393,472	9	1	8	3,619,412	34,581
1807 to 1812..	121	6	9½	420,187	8	8	5	3,550,756	38,875
1813 to 1818..	117	12	8½	467,061	7	5	7	3,402,633	39,856
1819 to 1824..	113	4	8¼	579,726	6	8	4	3,712,543	47,129
1825 to 1830..	112	4	7¾	761,670	6	1	0	4,585,176	59,968
1831 to 1836..	108	11	8½	847,806	6	3	1	5,229,203	69,646
1837 to 1842..	114	10	7½	882,528	5	19	0	5,434,286	65,720
1843 to 1848..	105	2	7¾	926,538	5	8	10	4,997,645	71,693

SWANSEA.

1819 to 1824..	111	1	10½	3,801	9	0	10	33,743	386
1825 to 1830..	109	7	9¼	11,075	7	13	6	82,792	986
1831 to 1836..	105	19	9¾	20,481	7	11	10	163,785	1989
1837 to 1842..	98	14	14¼	49,849	12	7	2	628,622	7550
1843 to 1848..	90	18	16¾	59,671	12	11	6	750,403	9767

* Copies can be procured at our office, price 7s. 6d. each.

PROGRESS OF MINING—HALF-YEAR'S DIVIDENDS.

BY J. Y. WATSON, F.G.S.

Mines.	*Amount.*	*Per Share.*	*Paid-up.*	*Price.*
Devon Great Consols	£19,456	£19	£ 1	£240
North Pool	7,250	72½	45	500
Carn Brea.....	7,000	7	15	120
East Wheal Rose.....	6,400	50	50	500
Wheal Basset	6,400	25	10½	300
Wheal Buller	5,434	42½	10	650
South Frances	5,270	42½	160	580
Treviskey	3,720	31	130	240
Seton	2,970	15	—	270
Trelawny	2,860	11	7½	90
Mary Ann	2,560	5	5	40
Bedford United	2,500	12s 6d	2½	4¾
Great Work	2,380	18	—	—
Wheal Friendship	2,240	17½	—	—
North Roskear.....	2,100	15	10	300
Stray Park	2,000	2	40	22
West Caradon	1,920	7½	20	90
Levant	1,600	10	—	170
South Tolgus	1,792	7	10	140
Providence Mines	1,568	14	—	140
Tremayne.....	1,536	1½	9½	11
North Basset	1,500	5s	—	11
West Providence.....	1,024	4	1	30
Wheal Margaret	1,568	14	79	180
Condurrow	1,280	5	20	85
United Mines	1,000	5	50	160
Balleswidden	913	12s 6d	9	14
Trehane.....	896	3½	1½	25
Comfort.....	768	6	45	65
Fowey Consols.....	741	1½	40	30
Wheal Reeth	600	5	—	120
Trethellan.....	600	5	—	25
Wellington	512	2	25	27½
Botallack	500	5	182	150
Great Consols	480	5	1000	250
Wheal Spearn	128	1	—	80
Penzance Consols	128	2s 6d	—	3¾
Total dividend paid on 37 mines.....			£101,594.	

WELSH MINES.

Lisburne	£ 4,500	15	75	—
Goginan.....	1,500	45	5	—
Total			£6,000.	

IRISH MINES.

Wicklow Copper Mines	£ 1,300	5	5	14
General Mining Co. for Ireland ..	325	5	1¼	4
Total			£ 1,625.	

FOREIGN MINES.

Cobre	£36,000	3	40	34 35
St. John del Rey.....	16,500	1½	15	13½
United Mexican	16,190	⅝	28½	4½
General Mining Association	10,000	¼	29	13½
Total			£78,690.	

MAKING A TOTAL OF

Cornwall and Devon	£101,594 0 0
Welsh.....	6,000 0 0
Irish	1,625 0 0
Foreign Mines	78,690 0 0

IMPORTS OF SPECIE.—From a return of the imports of the precious metals into the port of Southampton for the half-year ending the 30th of June last, the result is as follows:—

From Chili, Peru, Bolivar, Mexico, Central America, gold (83,317,760)	£ 663,592
Ditto ditto ditto silver (88,496,515)	1,099,263
From the United States (850,000).....	11,250
From Alexandria	56,732
From Constantinople	370,533
From Spain and Portugal	130,000
From other parts	7,750
Total for the six months ending June 30, 1850	£2.939,120
„ „ „ Dec. 31, 1849	3,275,931
„ „ „ June 30, 1849	3,372,724

HALL OF COMMERCE.—A prospectus has just been issued by the proprietors of this once popular building, stating that they have determined on opening the large hall as a place of rendezvous to merchants, bankers, manufacturers, shipowners, and other commercial and professional men. The terms of admission as members are moderate, who will be supplied with the daily and evening papers, shipping and commercial intelligence, maps, charts, itineraries, directories, steamboat and railroad information, with prices of stocks, prices currents, documents, and books of reference on commercial subjects, and all measures will be adopted for the comfort and convenience of its members. It would appear that such a central place of meeting was required, and yet we cannot forget how Mr. Moxhay was disappointed in all his spirited endeavours; we wish, however, the present present proprietors better success.

Original Correspondence.

MINE INSPECTION.

SIR,—When Mr. Richardson criticised my letters on "Mine Inspection and *Life Insurance*," for their strong attachment to "bye-gone customs, cherished notions," &c., I gave him credit for having some meaning in those remarks. I confess I did not understand them; but as the only thing I *did* advocate in my letters was this "bye-gone custom" of life insurance, I gave him the benefit of supposing his epithets were addressed to the subject. It appears they were only vague attacks, and that I was wrong in believing he wrote with any signification.

When I requested Mr. Richardson to make the plan intelligible which he supported, it was under the impression that no public measure would be produced at this late period of the session, and that a discussion in the interval would be the best course for promoting his views. What has since occurred certainly renders my demand for his private opinions unnecessary; the enactment which is contemplated will supply the want. I should myself, in advocating any plan, have grounded my arguments upon its merits. I should have dissected and demonstrated the subject before me, and explained the utility and action of its members, as the best means of convincing that it had a meaning, and that I understood its meaning. Doubtless, Mr. Richardson sees good reasons for a different course. We shall, perhaps, have them in the bill, whence his care to avoid details in writing; for I do not see that it is possible for any one to write on a subject at the length he has lately done on mine inspection without letting fall a single word to the purpose.

As Mr. Richardson "courteously" informs me I have not yet learned to read, I must be cautious in an opinion; but, according to my "cursory" understanding, I should say either that he is bewitched, or that his amanuensis has copied the wrong numbers from Mr. Elliot's evidence. If these answers are a "strenuous support" of Government interference, what is a doubtful support of it? I fear the majority of individuals who have not yet been favoured by attaining Mr. Richardson's perfection in the art of reading, will understand them as I do, to express "a hope," as what he describes "*is to come*," that "some good may be effected by it." The grounds of this hope, "*if*" it would have the effect of bringing other counties to the level of the northern district—"*if*" the Government "got some good practical men to superintend," I shall remark on presently.

Why will Mr. Richardson have the proof over again, that he considers inspection and the extinction of danger will be synonymous events, before he offers the least remark in invalidation of that proof? How is the sacrifice of the lives of a valuable and industrious race to be put a stop to, without the extinction of danger? I have over and over requested Mr. Richardson to argue with less declamation and more precision. If he adheres to the sweeping style, it is not my fault.

Mr. Richardson has a tender solicitude over characters as well as lives. I shall prefer taking care of my own, without the aid of an inspector, however great his qualifications. I shall maintain it wherever the appreciation is desirable, by continuing to assert plain facts. That when new offices are proposed, there are numbers of persons looking forward to fill them is one of these facts, and that such persons will recommend the creation of such offices is another. Mr. Richardson is surely himself charging a windmill, when he takes offence at such truths. Am I to assume that the *miners' friends* differ from all mankind, and that there is not one single interested voice to be heard in the clamour for inspection? I do not wish to dispute upon "courtesy." Mr. Richardson may retain the post he has assumed of *arbiter elegantiarum*, and judge the difference between us, which is this:—I have asserted there are numbers of persons desirous and ready to receive the salaries of inspectors, and in acquiring this solid comfort they are willing to persuade, and be persuaded, that it will impart an immediate capacity of doing good to others as well as themselves. This is one of the most ordinary and agreeable delusions of life, which a wise Legislature will always be on its guard against being deceived by. It is not the business of these private men to meddle with matters that are "too high for them," and break their necks in speculating on the *ultimate* and *national* effects of their own comforts. There are, of course, different shades of interestedness, but when we consider what a very intoxicating liquor the notion of being benevolent at other people's expense has always proved to be, my accusation is far from charging any one with a *crime*.

I wish Mr. Richardson had taken the pledge when I offered it to him, because then the sobriety of his own opinion would have been beyond suspicion. But what is the accusation that he brings? not that persons who do not see anything very clearly beyond that point are desirous of improving their own condition; but that his opponents from base, foolish, or unworthy motives, are actual and constant *accesaries in murder*; for what else is a "ruthless sacrifice of lives?" Let him judge whether he or I most "disregard the courtesies of civilised society." I was not aware morals were a matter of taste; certainly this taste of morals I do not like. I will say nothing of his personalities on "discretion, prejudice, corns, inattention, manliness, ingeniousness, reading, and despair," &c. &c., which have been the answers to my enquiries for information; though I think, as Mr. Richardson took on himself to censure me, he might have indulged in something that was pertinent.

Mr. Richardson may be right in considering all this the very pink of courtesy, and I will leave him in the middle of it, for my object is anything but personal altercation. The important purpose I have in view is a fair, honest, substantial exposition of the practical advantages of Government interference, which are to counterbalance its known and inevitable evils. To ring the changes on Adam Smith, Turgot, and David Mushet, is a poor substitute. We know, by arithemtic, that three names are capable of six transpositions, and, if "sound heads" are added, of 120; but, does this forward the discussion, or make the authorities I quote ridiculous? As an Englishman, and a mine owner, I feel that the enactment of such a measure will be a sentence of degradation upon a very large and important interest, and I *desire* to hear the evidence on both *sides* on which the sentence is to be pronounced. "Railing accusation" is not *proof* of evil, neither is vague assertion guarantee of good. The enactment can only assume one of two shapes; it must be a penal statute, and the inspectors a police to regulate the criminal default of the mine holders; or else a provision for their incapacity, stigmatizing them as incapable, and providing guardians for their imbecility. How, then, is it that the mining interest of this country has attained a position of such eminence?—By default and imbecility? Whence has the Government or Parliament derived their superior light, or any information at all which they possess on the subject? Is it not from that mining interest which it is sought to control? Are they, then, already wiser than their teachers? And who has decided that they are so? The proposal of inspection has originated with a clique, who work by the suppression of facts and the expression of exciting mis-representations; and I shall do what little is in my power to enable *truth* to fustrate the desire of handing over a weighty interest, which has achieved the state of perfection *described in the late reports, without the aid of the State*, to a system of dangerous expedients, that it may be preserved intact from that tinkering and experimenting which is unhappily so prominent a feature in present legislation. If all things "antiquated" are to be done away, I would rather explode the sect of busy bodies; not only are they as old as the apostles, but we read of a prating fellow of the class who reaped a broken head 1000 years before their era, his conceit described as towering upwards, like a conducter to attract the stroke. This summary jurisdiction is happily abolished. It is true, business must have existed before busy bodies, just as bottles preceded the invention of bottle-brushes; but as minding one's own business can hardly be entirely abolished, minding other people's is quite old enough to receive the requisite condemnation of "antiquity."

The reports of Messrs. Blackwell and Phillips are extremely interesting; they contain *more* practical detail and *less* hypothetical disquisition than their predecessors, but they still leave the real points which are involved in the proposed interference untouched. They place in a clearer light the perfect management which has been attained in the best collieries; and they repeat the undeniable and inevitable fact, that all collieries do not enjoy equally the benefit of this skill—that some are faultless, and some deficient in different degrees; but from these facts, to the propriety of Government interference, where is the *sequitur?* Between the two positions there is a chasm in the argument as deep as the Monkwearmouth Colliery. The attention of the commissioners is mainly directed to the *possibility* of establishing the system, not to the *propriety* of it. The main stay of their recommendation is that no insuperable difficulty exists to perpetrating the intrusion; and a proof is adduced in the invariable courtesy of the mine-owners in displaying their arrangements, and imparting information. The *obvious* inferences from this are passed over to press on to the required deduction that the establishment is *practicable*. The next position is the benefit to accrue, supposing the inspection established; and this hangs upon the slender particle "*if*." Upon this thread *all* the arguers in favour of inspection propose to suspend their cumbrous machine. "*If* each commissioner has a district, with the help of *sufficient assistants*," is Mr. Phillips's basis. "*If* other districts are raised to a level with ours," and "*if* the Government got some good sound practical men," is the basis of Mr. Elliot's hopeful endurance of the coming evil, expressed with his usual practical sagacity. "*If* they are not overmeddling inexperienced individuals," says Mr. Dunn, with his usual speculation. Upon this IF the whole question depends; for I repeat what I have constantly asserted, that only overmeddling individuals will ever press forward into the post of inspectors. In this I have the support of the first mining authority in the kingdom. Mr. Evan Hopkins asks, in his letter of the 5th June—"Is there a man of experience and judgment who will take upon himself the heavy responsibility of preventing accidents in collieries by mere casual visits?" I have asked again and again who the men are to be, and whence are they to be derived, possessing that superhuman sagacity of intuition, that they will be able to do more by these casual visits than the present managers can effect by constant attention.

The commissioners seem fully alive to this difficulty; the reports do not indicate such a class of beings; on the contrary, they abound with statements of the scarcity of *men* adequate to carrying out perfect arrangements in every part of this work, down to that most important desideratum—"steady good conduct in the workmen." These are met by equally abundant proposals on their part (whether fallacious or not, I cannot now examine) for remedying the deficiency. Why, then, in the name of common sense, before these deficiencies are corrected, is the steam of Government inspection to be put on, to force into work a machine, the parts of which are not yet fitted together? I have repeatedly pointed out the scarcity of that rare union of judgment, intelligence, activity, and integrity, which constitutes the complete manager. This difficulty is, as a matter of course, felt and expressed by the mineowers in the late memorials on mining schools, which complain "that, in many instances, no competent managers are to be found;" and I repeat the old, but never answered, question, where, when masters find a difficulty in meeting competent servants, is the Government to acquire that tribe of accomplished agents, who are to do more by a glance than the others by the study of their lives? The proposal so far outrages common understanding that, but for the noisy efforts of a speculative clique, it never could have obtained a hearing. To state plain facts is to "beg the question," according to Mr. Dunn's censure of Mr. Hopkins; whereas Mr. Dunn *assumes the question*, by resting it on an imaginary basis. This enormous further evil presents itself, that whatever practical talent the Government may be able to press into the service of inspection, there will be so much ability diverted from the most efficient channel. Every able man that is taken out of a pit, to swell the ranks of Mr. Phillips's "sufficient assistants," will be the gain of a loss. If the inspectors are *superior* to the viewers, they ought to *take their places* —it will be a public wrong to give them a less practical employment; if they are *inferior* to the viewers, they can have no business to inspect them. There is no escape from the dilemma of these alternatives; the contemplated enactment *must* inflict one of the two evils. It will either subject sound men to the mischievous vexation of the incompetent, or it will remove them from the sphere where their competence is most available. The state of the case against the mineowners is this:—To use Mr. Phillips's words, "the success of the general arrangements depends on the aid of subordinate officers, trained to acquire and act upon that intimate and instant consciousness of passing occurrences, which is necessary for the ordinary working of the mine, and upon the right use of which, in a moment of danger, the safety of the men may entirely depend."

No evidence can be more conclusive than this passage against any interference. It shows in the strongest light the utter inutility of the wandering inspector; and that mischief alone could result from meddling with such nicely-balanced arrangements. No argument is, or can be, founded upon it; but it is further alleged that, although the majority of mines are in this condition, there are *some* which are more defective. This is the only argument on which the call for inspection is grounded. Surely, in an age of such acuteness and illumination, something more ingenious can be devised for the improvement of deficient collieries, than the clumsy stalking horse of a Government inspection over both good and ill together. Fires occur in a city, both by negligence and intention. Must the corresponding device be the re-institution of the curfew, and the revival of that very ancient body of inspectors, to visit our houses at a regular or irregular hour, to put out our fires and take away our lucifers? There are haunts for thieves and other abandoned characters, where all iniquity is concocted. Would it be borne, for the misconduct of some, that the houses of a whole town should be subjected to the domiciliary visits of the police, to see if anything were amiss? Yet it is to a device not more astute and discriminating, equally vexatious and less efficient, that it is proposed to subject an interest, which it cannot be denied wears at least a *creditable* aspect in these reports, and represents, at the lowest estimate, in *collieries alone*, a capital of 100,000,000*l.* sterling. DAVID MUSHET.

[To be concluded in next week's Mining Journal.]

ERRATA IN THE CONCLUSION OF "PATENT RIGHT AND PATENT LAW."—Quotation from Pope: for "or seen," read "nor seen."; Sixth line below, for "and if the iron trade," read "if the iron trade had."

GOLD MINES AND CANALISATION OF THE ISTHMUS OF DARIEN.

SIR,—May I trespass on your columns with a few concluding remarks on the above subject? Immediately after the closure of the mines of Cana, by Royal decree of March 12, 1685 (v. 13 n. 7, of the Archives of the Secretaryship of the Vice-Royalty of Peru at Lima), the white Spaniards withdrew, with their slaves, and since then no operations were ever undertaken there. The natives of Darien (Indians, negroes, and samboes) having had an interest in concealing the existence of gold in their country, from fear that, if known, the whites would come there, and make them slaves, have thrown every obstacle in the way of the two or three people who have ever endeavoured to penetrate to Cana, of which obstacles I have had my share; consequently, even the name of Cana had almost become unknown, no person in Panama having ever been there, nor even any of the natives of Darien, except those born there, who finally abandoned it about 20 years ago since, when the road from Molineca having grown up in bush was impassable, until I had it cleared; for which purpose I would have found it impossible to engage men, even at $2 per diem, had I not a stringent order from Don Antonio Baraya, the Prefect of the territory of Darien, at Yavisa, to the Corregidor of Molineca. No fair trial has ever been given to the development of the mineral riches of either Darien, Panama, Veraguas, or Choco, nor have any carefully-conducted investigations ever been made. The natives have no tools of any kind, but even with their knives and a washbowl they often procure large sums of gold; but they only go to seek gold when they have some pressing need of ready money, as for a marriage, &c., or when they wish to make earrings, bracelets, &c. However, very recently the Americans have commenced operations, with great success, in Veraguas, whilst the English are lagging behind in enterprise; and Prof. Ansted, in his work on gold, states that, during the years 1800 and 1804, there were introduced into the Provincial Treasury, from the River Concepcion and its branches, 2067 lbs. of gold, to pay the 3 per cent., being 3 per cent. of the produce of these washings—a prodigious return, especially considering the very scanty number of diggers who could be found in that river. This gives nearly 70,000 lbs. of gold, or nearly 3,000,000*l.* sterling, for the whole return.

It occurs to me to be a pertinent question to ask, why long after the road from Panama to Portobello had been established as the regular line of transit across the isthmus, and after the Indians had cut off the communication between Cana and the sources of the Savana and Chuquanaqua and the Gulf of Uraba and the Atlantic coast, the Spaniards still maintained so many and such well-garrisoned forts in the territory of Darien? for instance, four at the mouth of the Tuyra, the Fuerte del Principe in the Savana, the fort at Yavisa, one at Chuquanaqua, also at Chapigana, Real de Santa Maria, Molineca, Pinogana, and Cana (Santa Cruz). Surely they could not have been for the protection of uninhabited, impenetrable forests. No fort exists between Panama and Portobello. As the old Spaniards of America were by no means an agricultural people, but exclusively soldiers and miners, and as by their custom every military establishment should be supported by its own locality, no funds ever coming from Spain, and as they were a people who would not stop anywhere for small gains, we are under the necessity of concluding, that those forts were for the protection of the mines, and that the mines were very rich—a fact still further proved, by the accounts in the archives of Panama, of sums transmitted to Spain for the King's 5 per cent; by the repeated incursions of the buccaneers, and by the Royal decree for the closure of those mines. As they were in full productiveness when abandoned, it may be presumed that the gold is there still.

As to the canalisation of the isthmus by the River Savana, it presents such obvious advantages—depth of water, directness of course, absence of brushwood and swamp on its banks, and consequent healthiness, narrowness of the isthmus, low elevation, and of narrowness of the ridge mountains at that spot, and consequent short distance of cutting, clean coast, and good anchorage on the Atlantic side, and a short and easy exit into the Pacific, &c.—that it *must* ultimately be adopted. I would propose that labourers be obtained from the West Indies, and from all the coast of America, from Brazil to Carolina. From all points on that line of coast, well acclimatised white men, willing to work, could easily be got together by a few circulars posted to the various seaports by the West India mail; and thus the necessity of beating up an emigration of free negroes from Africa, recommended in the *Times* of 13th June, be avoided. Should the plan of a free emigration be commenced, some arrangement should be made with some of the native kings; as, nine years ago, when I was in Demerara, the *Superior* arrived with only nine emigrants, although she had been three months on the coast of Africa, and had brought out four Demerara negroes as delegates; she lost several white sailors by fever. Other ships came in with even fewer emigrants; but this ill success was owing to the opposition of the missionaries and of the Colonial Office, and the neglect of any preliminary arrangement with the native kings. I expect soon to receive a communication on the subject of the Savana river from my friend, General Jose Domingo Espinar, of Panama, Brigadier-General and Colonel of Engineers of the Army of Peru, M.B. of Saragossa, and M.D. of Lima, the best surveyor in South America.

Dominick-street, Dublin, July 2. EDWARD CULLEN, M.D.

ON THE TREATMENT OF SULPHUR.

SIR,—From the tenour of "J. W.'s" letter, in last week's *Mining Journal*, I am led to infer that he holds a patent for the application of steam to sulphurets in reverberatory furnaces, and that he refers to that when he states that I am regardless of the rights of property. I beg to state, for "J. W.'s" more especial consideration, that I hold an expired patent for the application of steam to a sulphuret on the hearth of a reverberatory furnace. The object I then had in view has been more fully attained by the adoption of the water-grate.—T. H. LEIGHTON: *July 2.*

THE WELSH COLLIERY CASE—DUKE OF BEAUFORT *v.* MORRIS.

SIR,—As you have taken some interest in this suit, I beg to enclose you copy of the Lord Chancellor's final judgment. G. BYNG MORRIS.
Reform Club, July 2.

"When this case came before me, upon appeal from the decree of Vice-Chancellor Wigram, I thought the decree right, with the exception of an admission, the defendant was called upon to make, of a fact which I thought the plaintiff was bound to prove. Striking out, therefore, that part of the decree, I affirmed the rest, which was simply to retain the cause, giving to the plaintiff an opportunity of establishing his right at law, for the suit was strictly an application to a court of equity for the protection of an alleged legal title, the plaintiff alleging that he was proprietor of a certain colliery and works, and engines for draining the same; and that the defendant was proprietor of adjoining collieries and works, which he was so using and managing as to let water illegally flow into plaintiff's colliery and works, and so create damage and injury, and thereupon praying an injunction. All this depending upon the legal right, as alleged, Vice-Chancellor Wigram very properly withheld the interposition of equity, until the plaintiff had established his legal title, consisting of the right alleged, the acts complained of, and their illegality. The plaintiff failed in the action, because, as it is alleged, it appeared that the level of the water in plaintiff's mine was higher than the levels of defendant's adjoining mine, so that there could not be any flow of water from the defendant's mine to that of the plaintiff's, and, consequently, that there could not be any wrong or injury done to the plaintiff. This would have been conclusive of the fate of the suit, but the plaintiff having petitioned for leave to rehear the appeal, and upon the application, leave having been again given to discuss the case, as upon the equity reserved, the whole merits of the case were gone into; and what I reserved for consideration was, whether under the facts as they now appear, and with the case as made upon the pleadings, the plaintiff is entitled to any relief. That he is not entitled to any relief founded upon any injury actually sustained to his legal right, is established by the result of the trial, and cannot now be disputed. But on behalf of the plaintiff, it was contended that he is entitled to an injunction upon the principle of *quia timet*, and that the injury, though not actually sustained, is imminent, and, if not prevented, will arise from the illegal act of the defendant's actually in progress. The facts of the case, as stated in the bill upon this subject, are very simple; it being unnecessary to advert to the earlier part of the statement, showing the history of these mines, and the terms under which they have been held, according to the facts stated to be actually existing. The case made is—the plaintiff, as proprietor of a colliery, called Landore, in which there is an engine raising and discharging the water at the surface; that the defendant was possessor of another colliery, called Pentre, of a higher level than Landore, and that the water collected in the Pentre had formerly passed through works of Major Philipps's into the Landore Colliery, and had been discharged by the Landore engine, and of this no complaint is made, nor is it alleged that the plaintiff has a right to object to the ordinary drainage from Pentre being discharged through Landore; but the alleged grievance is, that there are certain old workings in Pentre, forming pits, 20 or 30 yards deep, and below the drainage through Major Philipps's works, full of water; and that the defendant having another colliery, called Cae Grobos, being at an intermediate level between Pentre and Landore, was opening the ground between Cae Grobos and Pentre, at the bottom of these pits (Cae Grobos also communicated with Landore), the effect of which would be to bring down upon Landore all the water collected in these pits, which would swamp Landore, and overpower the engines. The answers stated that —what the bill represented to be in progress had actually been effected, and that the communication between Cae Grobos and Pentre had been completed, and all the water drawn from those pits, but that no injury had arisen to the plaintiff This appears to be the fact; and the fact being so there was an end of the bill, as a bill *quia timet*—the fact was accomplished, and if the plaintiff had a right to complain, his remedy at law was his proper course, and his failure proves that there has been no wrong or injury. He failed because, as it appears, notwithstanding the water coming from Pentre and Cae Grobos, the level in Pentre is still lower than that of Landore; the plaintiff having ceased to work his engine, so that no damage has been sustained to support the action, and none is to be apprehended from any future acts of the defendant, the whole having been completed, and, as matters exist, no injury inflicted. It appears to me, therefore, that, under the existing state of things, the plaintiff cannot have any relief upon his bill, whether it be considered as seeking the protection of equity in support of legal rights, or a protection against anticipated injury; and, consequently, that the bill must be dismissed with costs upon the equity reserved, and the petition dismissed with costs."

NOISELESS CARRIAGE WHEELS AND HORSE-SHOES.—In the *Mining Journal* of July 22, 1848, we noticed the introduction of some improvements in the construction of wheels for carriages, by Mr. Andrew Smith, the patentee of the wire-rope machinery, which were likely to prove of much value to the public as not only adding greatly to comfort in travelling over paved streets, from their being perfectly noiseless, but from their combining a much greater degree of safety. The principle consists in forming the hoop or tire of two separate layers of galvanised iron, which are rivetted together, and re-galvanised in the mass; this division of parts cutting off all vibration when travelling over the roughest stones. Mr. Andrew Smith has also applied the principle to springs, in which each plate is galvanized separately, and can never rust. The axle is also made to fit the axle-box with perfect exactness, by a lining of fusible metal, is self-lubricating, and not liable to heat; the whole in conjunction secures a degree of quiet, easy, and safety hitherto unattained. We have been led again to notice these ingenious improvements, from the fact that the patentee having produced a noiseless carriage, found that the horses' feet made more noise than ever, and seeking for a remedy has applied the same principle to the horse-shoe. This is effected in the most simple manner, by making the shoes in two thicknesses of galvanized metal, then rivetting them together, and re-galvanizing. A horse equipped in these pumps trots over the granite streets of London as softly as if he was on a bowling-green.

FLAX MADE TO RESEMBLE COTTON.—However much the following method may now admit of simplification, it is very interesting to see how much cotton was esteemed formerly in relative value, and how much skill and capital have had to do with its present general development. In the *Swedish Transactions*, for the year 1747, a method is given of preparing flax in such a manner as to resemble cotton in whiteness and softness, as well as in coherence. For this purpose a little sea-water is to be put into an iron pot or untinned copper kettle, and a mixture of equal parts of birch ashes and quick lime strewed upon it; a small bundle of flax is to be opened and spread upon the surface, and covered with more of the mixture, and the stratification continued till the vessel is sufficiently filled. The whole is then to be boiled with sea water for ten hours, fresh quantities of water being occasionally supplied in proportion to the evaporation, that the matter may never become dry. The boiled flax is to be immediately washed in the sea by a little at a time, in a basket, with a smooth stick, at first while hot; and when grown cold enough to be borne by the hands, it must be well rubbed, washed with soap, laid to bleach, and turned and watered every day. Repetitions of the washing with soap expedite the bleaching; after which the flax is to be beat, and again well washed; when dry, it is to be worked and carded in the same manner as common cotton, and pressed between two boards for 48 hours. It is now fully prepared and fit for use. It loses in this process nearly one-half its weight, which is abundantly compensated by the improvement made in its quality.

VALUABLE PRODUCTIONS FROM TURF.

The vast extent of peat or bog land existing in this kingdom, particularly in Ireland, the produce of which has hitherto generally been employed only for fuel among the poorer classes in a simply dried state, contains a variety of substances, which, when extracted by chemical means, may be converted to valuable commercial purposes. Much attention has of late years been turned to the subject, and various plans have been proposed, and patents taken out for drying, compressing, converting into coke or charcoal, and extracting the various oils, acids, ammonia, &c., contained in it. We have been led particularly to notice the operations of the Dartmoor Peat Charcoal Company (a private firm), who have obtained a grant of peat land on Dartmoor, of 8500 acres, where they have carbonising works erected.

We have during the week had an opportunity of inspecting, at their London office, in Birchin-lane, some of the productions from turf obtained during its carbonising process; and when we regard a piece of dry uninteresting looking compressed vegetable matter as the source, the result is truly extraordinary. We were first shown a specimen of turf from near the surface, and one in a state of natural compression from depths of from 10 to 30 ft.; then various descriptions of coke or charcoal, differently prepared, for deodorising, domestic fires, metal working, and iron smelting. A large proportion of a highly fetid oil is obtained during the destructive distillation, which, however, by purification can be converted into a brilliant oil, free from any disagreeable effluvia. The bitumen produced can, by solution, be rendered exceedingly pure, and may become highly advantageous for protecting iron and wood-work exposed to the atmosphere. A large quantity of stearine, or vegetable tallow, is produced, of a dark colour, but which can also be purified and bleached. The sulphate and other salts of ammonia, and pyroligneous acid, are likewise collected.

In addition to these useful productions, there is a brilliant yellow ochre, which forms a valuable pigment. These several highly valuable products, from a substance covering millions of acres of land, which, by its removal, might be brought into cultivation, opens a fine field for the profitable investment of capital, and the employment of the rural population; and this firm have pioneered the way to a success which we hope to see triumphant, not only in Dartmoor, but extensively carried out in suffering Ireland. Notwithstanding the several attempts which have been made to the profitable conversion of peat to employment in the arts, this firm are the first who can be said to have commanded complete success; and much credit is due to them for their exertions in this important branch of science.

THE GREAT SCOTCH COAL-WORKING QUESTION.

The long litigated dispute between the Earl of Glasgow and the Hurlet and Campsie Alum Company was decided in the House of Lords on Tuesday last, when judgment was given on the appeal from the decree of the Court of Session. The essential question in the present proceedings arose upon the construction which was to be put upon a contract for a lease, which had been entered into as far back as the year 1800, between the late Earl of Glasgow and the predecessors of the respondents, wherein the latter had acquired a lease for the term of 63 years of the alum ore in the coal mines, and what are termed the coal wastes, belonging to the noble earl at Hurlet, in the county of Renfrew. The point in issue was whether the landlord and his coal tenants were entitled to work out a large extent of "pillar coal," the said coal in the mines having been exhausted, without a contravention of the terms of the lease which had been granted to the predecessors of the respondents. Under the terms of that lease the Earl of Glasgow conveyed "the whole of the ore in the said coal pits and coal wastes at Hurlet, from which alum can be manufactured, excepting the pyrites and copperas stones, which are already conveyed to the partners of the Hurlet Copperas Company, and that during the space of 63 years from and after the term of Martinmas, 1799." The Earl of Glasgow is the proprietor of very extensive coal wastes formed in working the large field of coal in his Lordship's property at Hurlet, in the county of Renfrew. The other appellants, Messrs. John Wilson and Sons, are his Lordships tenants of the coal and limestone, under a lease for 17 years, commencing in 1835 and ending in 1852. The respondent, Mr. King, has a grant, by a contract dated in 1800 from the late Earl of Glasgow, of the whole alum ore or schistus in all the coal wastes at Hurlet, for a period of 63 years, from Martinmas, 1799, ending at Martinmas 1862, with a right to the use of the wastes during the same perod for collecting and working the ore. The formation of the coal wastes at Hurlet is the result of the mode there adopted of working the coal, which is that of working by stoop and room—the stoop being the pillar which is left for support of the roof, and the room the vacuity between the pillars caused by excavating the coal. The pillars are essential for supporting the roof; and it is the statement of both parties, in conformity with the undoubted fact, that whenever the pillars are removed the roof immediately gives way, and the whole superincumbent strata fall down and entirely extinguish the wastes. The question between the parties now for consideration is, whether the conveyance of the alum ore and the Earl of Glasgow's coal wastes to the respondents' company is an absolute and unconditional conveyance for 63 years, so long as there is workable alum in the wastes, entitling the respondents to insist on the preservation of the wastes, and to prevent the removal of the coal pillars necessary for support of the roof during that whole period; or whether, as the appellants contend, the right of the respondents to the alum ore and to the coal wastes is subordinate to the right of working the coal by the proprietor or the coal tenant, and not sufficient to warrant any opposition to the removal of the coal pillars at the discretion of the parties interested in the coal.

In charging the jury upon the proper construction of the contract of 1800, the presiding judge gave the direction that for the full period of 63 years in the contract, and while there is alum ore in the wastes, the respondent is entitled to prevent the appellants from removing the coal pillars, so far as these are necessary for supporting the roof of the wastes, and the judges of the first division were unanimously of the same opinion. The minerals found in the Earl of Glasgow's property at Hurlet are various. There is, first, a seam of coal of a soft and sulphurous quality, and of about 5 feet thick. Immediately above the coal lies the alum ore or schistus, varying in thickness from 2 to 3 inches to upwards of 3 feet; and above the alum ore there is limestone rock about 3 feet thick. Above the limestone there is another bed of aluminous schistus, called the duff bed, and some small seams of ironstone, &c. The alum schistus is a substance of very peculiar qualities, and it is confined in Scotland to a district of country in the immediate vicinity of Hurlet and of Campsie, in Stirlingshire, where the respondent also manufactures alum. This ore is also found at Whitby, in England, in large quantities, but of a very different composition from that at Hurlet—the proportion of sulphur and allumina being greatly less. It is the limestone which constitutes the strength of the roof in the Hurlet wastes. There is no such cohesion or firmness in the upper materials as to form a roof; and, therefore, wherever the limestone is wholly removed or fractured, the superincumbent mass comes down, and fills up the waste at the particular place, constituting what the miners call a lum. This descent of the upper strata does not, however, take place in the proper working of the lime as practised to a great extent at Hurlet, where, in the wastes now open, above 30 acres of limestone have been worked, after exhausting the coal and alum schistus. The mode adopted of working the limestone is not to remove the whole of it, which would be dangerous, and even impracticable, but to leave about a foot of it in thickness untouched, called by the miners the lid or bonnet, which is sufficient for the support of the roof. Where, therefore, the limestone, as well as the alum schistus and coal, are all removed, the wastes still remain open, and the cavity is of considerable height, varying from 9 to 12 feet. In these portions of the wastes the pillars are of course composed—first, of the coal; second, of the schistus; and, lastly, of the limestone, and the rooms assume the shape of a vaulted chamber. The extinction of the wastes by the fall of the roof, following on the removal of the pillars, is termed a crush. This crush is admitted on both sides to be the inevitable result of removing the pillars; and, when once commenced, it is extremely difficult to say how far the crush may proceed, in consequence of the "creeping" and lateral pressure which frequently takes place, and extinguishes a great extent of waste. It was, then, in reference to the removal of any of these "pillars," that the proceedings out of which the present appeal had arisen had been instituted.

Sir F. Kelly and Mr. Inglis were heard in support of the appeal, and Mr. Bethell and Mr. Cockburn were heard on behalf of the respondents.

Lord Brougham now moved the judgment of the House, and after having adverted to the facts of the case, and to the preliminary objection which he had a few days since overruled, said that the addition which had, subsequently to the tender of the bill of exceptions, been made to those exceptions by the learned judge in the Court below was extremely irregular. Their Lordships had since that overruling heard the case upon its merits, and he was of opinion that the pillar coal could not be removed, and that the construction which had been put upon the terms of the lease by the Court below, both in the first division and at Nisi Prius, was the true and correct construction. That being so, he should move their lordships to affirm the interlocutor of the Court of Session, and that the appeal be dismissed with costs.

One of the most valuable iron mines in England has been discovered in Whitehaven. The vein is 13 and 25 feet in thickness, and contains 65 per cent. of iron.—*Newcastle Journal.*

THE ELECTRIC TELEGRAPH IN FRANCE.

The report of the committee on the electric telegraph, on the project for opening the telegraph to the use of the public, has been brought up by M. Leverrier. It states that several lines have been constructed, and are in course of construction, and that shortly the north of France will be in telegraphic communication with the centre and the west. The lines of Chalons-sur-Marne and Tonnerre will render more rapid the relations with the east and south. Later these lines will be continued to Nantes and Bordeaux on the one hand, and to Strasburg and Marseilles on the other. After a long discussion, the majority of the committee has resolved to recommend the opening of the telegraph to the public, but under certain conditions, such as that no person who shall be unknown shall be allowed to use the telegraph—that all despatches, except articles of newspapers, shall be copied into a register at full length, and that the Govern- shall have the power, when it may think fit, to suspend the use of the telegraph. The tariff for despatches the committee propose to fix at 3 fr. for from 1 to 20 words, with an addition of 12 c. a myriametre. The committee also propose that the Government shall contract with the journals to send news to be inserted in them at a reduced cost. The report of M. Leverrier contains much interesting and valuable matter, but as we have not space to publish it in detail, we have been obliged to confine ourselves to some extracts:—The lines of electric telegraph are spread over all the territory of the United States. One commencing at Burlington, on the frontier of Canada, goes to Boston, New York, and Washington, passing through Baltimore and Philadelphia; then crossing Virginia, Carolina, and Georgia, it extends by Richmond, Raleigh, Colombia, Augusta, and Mobile, to the Gulf of Mexico, and to the embouchure of the Mississippi, which it reaches at New Orleans. From New Orleans a second principal line ascends the valleys of the Mississippi and Ohio to Louisville. Other lines commence from the shores of the ocean, going towards the centre of the country, or ascending to the great Northern Lakes. The line from Burlington to New Orleans is not less than 2600 miles—that is, 290 miles between Burlington and Boston, 250 miles between Boston and New York, 343 miles from New York to Washington, 509 miles from Washington to Colombia, and 1207 miles from Colombia to New Orleans. The line from New Orleans to Louisville is 1150 miles. These lines are not always made to follow the railways, but generally take the shortest course, and this on account of the great distances which mostly separate the principal stations. The wires are suspended on posts of wood insulated on glass rollers, and often consist but of one or two; but when they pass by a river, or arm of the sea, they are enclosed in gutta percha tubes, and sunk under water. The telegraph from New York to Washington passes thus under four miles of the sea. The construction and repair of these telegraphs are submitted to the most rigid economy, and frequently the farmers, through or by whose lands they pass, undertake to keep them in order, for the liberty of using the telegraph.

The report then gives the details of the electric telegraph in England, and proceeds with a description of the Prussian system, the principal anomaly of which is the wires being generally carried underground. The committee recommends a serious consideration of this part of the Prussian system, and, if approved, its adoption in France. Speaking of the advantages in the early dissemination of political intelligence, which would be afforded by a large and complete electric telegraphic establishment, the report says—"The provincial journals, put in possession the same day of important news, may publish it simultaneously with the journals of the capital, and nothing could prevent the Government from communicating every evening to all France the principal events of the day. By thus affording a means of testing the truth of statements which often arrive altered or mutilated, a great and moral revolution would be effected in the press."

The report then proceeds to consider the various improvements proposed in the telegraph, but as a large amount of information upon this part of the subject has already appeared in the *Mining Journal*, we refrain from entering into an unnecessary iteration of particulars.

IMPROVEMENTS IN THE ELECTRIC TELEGRAPH.

Mr. I. L. Pulvermacher, C.E., of Vienna, has obtained a patent for improvements in galvanic batteries, in electric telegraphs, and in electro-magnetic and magneto-electric machines. The patentee describes and claims:—

1. Making galvanic batteries to revolve.

2. In respect to galvanic batteries, the use of half porous and half glazed diaphragms, a rotative action by which the plates or electrometers are dipped into or lifted out of the acids (more or less) at pleasure, a mode of entirely emptying the apparatus of the nitric acid when requisite; a hollow axis or axes, pipe and reservoir, by which the nitrous acid fumes are carried off and collected, and certain electro-magnets and parts in immediate connection therewith, whereby the electric current is maintained at nearly one uniform strength; as also an apparatus for increasing or diminishing the resistance to be overcome by such revolving batteries.

3. Certain modifications of the revolving galvanic battery.

4. A revolving battery, in so far as regards the employment of three fluids, of which one (the concentrated sulphuric acid) is used to prevent the two others (the nitric acid and dilute sulphuric acid) from mixing, and the arrangements by which such separation is effected; and also certain modifications of the said three-fluid battery.

5. A self-supplying revolving battery, and a modification thereof, in so far as regards certain mechanical arrangements, by which the expansion or reduction of the strength of the current generated by the battery is made to be itself the means of obtaining a fresh supply of the necessary elements.

6. The employment in galvanic batteries of diaphragms and cones composed of graphite, made plastic by pulverization and mixture with bituminous substances; also a particular form of graphite diaphragm, and a diaphragm partly composed of plastic graphite and partly of glass or porcelain.

7. Certain hydro-voltaic chain batteries, in so far as respects the arrangement by which every link is made to constitute of itself a separate and distinct battery, having a positive and negative electro-motor; and also the combination therewith of moderators and indicators.

8. Three several modes of changing the direction of electric currents; that is to say—1. The regulation of the changes of the poles in such manner that between each change and that which follows next the power of the current shall gradually increase from a minimum to a maximum, and then in the gradual manner decline from a maximum to a minimum, at which last point (alone) the change takes place.—2. The producing of the changes in two or more parts of magnetic conductors, by means of a single apparatus, and in such manner that, whilst the current in one conductor is gradually increasing in power, that in the other is gradually diminishing, and the change of direction is produced at the moment when the diminishing current attains to its minimum; and—3. The mode of producing the change of power by either gradually increasing the surfaces of the electrometers in the case of moveable batteries, or by the successive introduction (in the case of stationary batteries) into the electric currents of resisting bodies.

9. An electro-magnetic arrangement for the production of mechanical power; that is to say, in so far as regards the combination of a single galvanic battery with two cylinders covered with electro-magnets, and the enveloping or connecting these magnets, the whole or part of them, by coils of conducting wires, and the other parts in immediate and necessary connection therewith; also a modification of the said arrangement, wherein three or more cylinders, covered with electro-magnets as aforesaid, are used instead of two.

10. A governor for regulating the degrees of immersion of the electrometers into the exciting fluids.

11. An electro-magnetic motive engine, in the general arrangement and construction of parts of which the same consists, and more especially in respect of a method by which a continuous and uninterrmittent action is produced from two sets of electro-magnets, and the necessity for a fly-wheel thus dispensed with.

12. A magneto-electric rotary engine; also a modification thereof, wherein three flat plates are employed as the magnets.

13. Certain improvements in electric telegraphs; that is to say, in so far as regards—1. A method of varying the intensity of the current, either by increasing or diminishing the number of elements employed, or by interposing more or less powerful resistants to the current.—2. The imprinting letters or signs by one completion of the current.—3. The substitution of a letter cylinder for the letter wheel ordinarily employed, and a method of arranging the letters and signs on such cylinder.—4. The application of double escapements, each capable of assuming four directions, and each producing effects different from those produced by the others.—5. The employment of four electro-magnets to act on two soft iron bars, and thereby render a weak galvanic current available in two directions, and productive of two separate and distinct effects; and—6. The method of gradually detaching the keeper from the electro-magnet, by causing the springs which act upon the keeper to come only successively into operation.—14. A flat arrangement of electro-magnets.

The Patent Impulsoria.—An ingenious means of applying animal power to the working of railways, so as to supersede the costly locomotive engine, has lately been invented in Italy, and exhibted experimentally upon the South-Western Railway. It consists in introducing the animals into a kind of coach, called impulsoria, by which they transmit their acting power to the leading wheels. This transmission is conveyed by very simple means, rendering useful both the driving power of the animals and their own weight. The horse being thus introduced into the impulsoria, is placed upon a perfectly rectilinear, artifical ground, or platform, turning so easily that the animal, which is yoked to the shafts, when it walks does not itself advance; but, what amounts to the same thing, the platform itself is pushed backward. By this artifical ground platform, called by the patentee *pedivella*, is moved a tree, around with a pulley, from which, by means of a rope the motion is conveyed to the axle-tree of the leading wheels. The varying proportions between the diameters of the pulleys give different degrees of speed. The horses are to be worked always at their usual pace, whilst the new locomotive will be able to run at any requisite speed, even at 60 miles an hour, without even altering the usual walking pace of the horses, which are inside the impulsoria, as on the floor of a room, sheltered from the weather. The importance of introducing the horses into the carriage, in order to get more speed from the surplus of the acting power, had long been thought of; and the principle has been several times attempted, in England, France, and Italy; but hitherto without success. The new machine, whose inventor is Signor Clemente Masserano, from Pignerol, Piedmont, has been brought from Italy to England, and deposited at the Nine-Elms terminus of the South-Western Railway, where it may be seen working on the line. It has been made for two horses only, and they work it very well on the *pedivella*. More than 30 waggons have been already experimentally drawn by it up the very inclined line of the station. For working it up and down the station, a waggon is fastened to it, when it attains a speed of 7 miles an hour. In the experiment to be made on the great line, it is expected to gain a speed of from 15 to 20 miles an hour, and it is calculated that an engine of two horses more will run at a speed superior to that of a steam-engine. The impulsoria runs either way, like the steam-engine; but the driving-horses do not change direction or movement. They can instantly be stopped, without dropping the machine; and the machine can likewise be stopped, while the horses continue to walk on the *pedivella*, without transmitting motion to the leading wheels. By the simple manner in which the horses exercise their moving power on the new machine, they can work easily the usual time (commonly about eight hours a day). During these eight hours, the impulsoria can run at least over 30 miles eight times; and as four horse sdo not cost much more than two shillings each per day, it would be an expense of eight shillings only, instead of 6*l.* on account of coke only, the cost of which is sixpence each mile run. Such economy is of the utmost importance to the numerous interests engaged in the railways, subject to enormous working expenses. According to the statements by Dr. Lardner, in his valuable work on "Railway Economy," the locomotive power and stock absorb always more than half, and often four-fifths of all the working expenses. But the principal advantage of the new machine will be to afford very cheap locomotive small branch lines, thus extending the advantage of the railway to localities hitherto impracticable from the expensive moving power. The directors of the South-Western Railways were the first to receive the propulsion on their line, where they have granted every facility to its ingenious inventor; for which courtesy he has especially to thank the engineer-in-chief of the locomotive department, Mr. Gooch, and his assistant, Mr. Trevethick.

Railway Points and Crossings.—Mr. William Campbell, C.E., the resident engineer of the Edinburgh and Bathgate Railway, at Uphall, read a paper at a late meeting of the Royal Scotland Society of Arts, in which he described a sketch of railways, sidings, &c., showing the positions of the points and crossings, working drawings of the switch and stock, or fixed rail, and the crossing rails as executed on the Edinburgh and Bathgate Railway, full-size cross sections at the points of the model, the common and the patent switches, showing the different methods of leading off one rail on to another, the position of the rail in the chair, &c. The improved switch, of which a full-size model was shown, is on its bottom side the same as the common make; while on its top side it resembles the patent switch, but is simpler to make, is equally efficient, and will stand more fatigue. He had made careful examination of the points on the principal lines, and observed their great tear and wear; therefore, in the model the bearing surface is neither notched nor undercut—the inside of the top of the switch being bent with a twist, so as to pass under the top flange of the stock rail. The top of the switch not being mitered into the underside of the bearing surface of the stock rail, it is not liable to be locked by the barbing over of the stock from the pressure of the wheels, as happens to the general make of the patent switch, and others which resemble it in cutting under the top flange of the stock. A cut of rail, rusted and varnished in the end, showed the laminating structure of the top of the rail, which is the part that gives way under traffic, by scaling off from the constant impact of the wheels. This is kept in view in the make of the improved switch. The cutting away part of the under flange of the stock, while it does not materially weaken it, allows a broader and steadier base for the switch; and stones will not so readily rest between and prevent the shutting of the switch. The drawings showed how the common make of switch possessed the advantage of a straight face and continuous bearing surface in great perfection, although, from consisting of two parts, was much less durable at the point than the model. The author was not aware of anything having been done to meet the tear and wear of the crossing point, notwithstanding the weight of the engines in use. Any contrivance of the main road must be very secure; but at stations where there is much traffic, while the transit is slow, the wheels might be assisted over the interval at the crossing point by a piece of iron, keyed between the rails, having its surface 1 in. below the top of the rail, and tapering down at each end, on which the flange of the wheel would run till the face again touched the rail, and so be prevented from falling, as it does, off the steeled point with a blow on the knee of the wing rail, which is the point that gives way. This is similar to what is done at the crossing of the bars on a turn-table. The chair is laid level on the sleeper; but the seat of the rail is inclined 1 in 15 in the chair, so as to give the rail an equal cant its whole length, to meet the cone of the wheel. The inside jaw of the joint chair should fit close up under the flange of the rail; but the intermediate chairs should not rise quite so high, and be slightly rounded on the inner face, to allow the rail to adjust itself to the joints, which are first keyed and spiked firm. Mr. Campbell's improvement has been highly approved of by engineers and others acquainted with the practical department of railways; and, on the above occasion, called forth the unanimous thanks of the Society of Arts.

The Railways of the World.—One of the most surprising circumstances attending the creation of railways is the amount of capital which, within a limited period, has been expended in their construction and equipment. According to the calculations supplied in the work before us, there were in operation at the commencement of 1849, in different parts of the globe, a total length of 18,656 miles of railway, on which a capital of 368,567,000*l.* had been actually expended. Besides this, it is estimated that there were at the same epoch, in progress of construction, a further extent of 7829 miles, the cost of which, when completed, would be 146,750,000*l.* Thus, when these latter lines shall have been brought into operation, the population of Europe and the United States (for it is there only that railways have made any progress) will have completed, within the period of less than a quarter of a century, 26,485 miles of railway—that is to say, a greater length than would completely surround the globe, at a cost of above 500,000,000*l.* sterling. To accomplish this stupendous work, human industry must have appropriated, out of its annual savings, 20,000,000*l.* sterling for 25 successive years! Of this prodigious investment, the small spot of the globe which we inhabit has had a share, which will form not the least striking fact in her history. Of the total length of railways in actual operation in all parts of the globe, 27 miles in every 100 are in the United Kingdom! But the proportion of the entire amount of railway capital contributed by British industry is even more remarkable. It appears that, of the entire amount of capital expended on the railways of the world, 54*l.* in every 100*l.*; and of the capital to be expended on those in progress, 68*l.* in every 100*l.* are appropriated to British railways!

Dublin and Belfast Junction Railway.—Mr. Dargan on Tuesday last recommenced the work on this line, at Portadown, and intends to proceed rapidly with it until completed. It is now three years since the works on this line first commenced, between 5000*l.* and 6000*l.* having been then expended on it.

Among the numerous specimens of agricultural and horticultural machinery and manufacture exhibited at the Royal Polytechnic institution, are some tiles for the better growth and cultivation of strawberries, deposited there by the inventor, Mr. Roberts, of North Brixton. These tile, when placed in pairs, leave a round hole in the centre to enclose the plant, while the fruit and leaves rest on the flat surface of the tile, and are kept totally free from wet and dirt, the tile retaining the heat for many hours after sunset, consequently ripening the fruit much earlier than by the common system; in proof of this, the only out-door growth of strawberries exhibited at the late meeting of the Botanic Society, were raised by this plan, by the above-named gentleman.

ACCIDENTS.

Callington Mines.—R. Rickard was sadly injured by the ground falling in upon him.

Polberrow Mine.—J. Tamblyn and W. Kent were killed by a piece of ground falling out on them from the back of the level where they were at work, and burying them.

Risca Colliery.—William Moor was killed at the Risca coal works, in consequence of a fall from the top of the stall in which he worked. About a tramfull of rubbish fell upon him; he called out to some of the nearest men to extricate him, but before he could be reached, a stone 6 or 7 cwts. fell on his head, killing him instantaneously.

Wishaw.—While the miners were at work in No. 4 pit, a portion of the roof fell in when four of the workmen who happened to be under it were killed on the spot. David Muirhead has left a widow and large family, R. Hunter a widow and young child, and Muirhead and Douglas, both young men. The poor fellows were working in opposition to the wishes of the old hands, who have been for a number of weeks on strike for an advance of wages.

Merthyr.—William Jones was killed by a fall of roof while working in one of the Pantywain pits.

Aberdare.—H. Giddery was killed at the Gadly's New Pit.

John Phillips was killed by a fall of coal at Hirwaun.

John Zachariah was killed by a fall of coal in the level of Yr Avon, Abernant.

Oldham.—Joseph Ashcroft, aged 12 years, while acting as waggoner at the New Engine Pit, Chadderton, was adjusting the coals in his waggon, when a prop, placed to keep the waggons on the rails, gave way, and caused him to be jammed against the roof. The poor fellow, after lingering in great agony about 12 hours, expired.

Brierley Hill.—J. Winslow was killed by a fall of coal in a colliery at Pensnett Common.

Derbyshire.—Moses Aram was killed by a fall of stone while working in the coal pit of Messrs. Barber and Walker.

COAL MARKET, LONDON.

PRICE OF COALS PER TON AT THE CLOSE OF THE MARKET.

MONDAY.—Buddle's West Hartley 13 6—Carr's West Hartley 13 6—Chester Main 12 6—Davison's West Hartley 13 6—East Adair's Main 11—Holywell 14—North Percy Hartley 13 3—Ravensworth West Hartley 13—Tanfield Moor 12 6—Tanfield Moor Butes 11 6—Townley 11 6—West Hartley 13 9—West Wylam 12—Wylam 13 3—Wall's-End Brown 12—Browne's Gas 11—Gosforth 13—Hilda 13—Northumberland 13 3—Walker 12 9—Eden Main 13 9 and 14—Lambton Primrose 14 3—Belmont 14—Braddyll 15—Hetton 15 6—Haswell 15 9—Lambton 15—Russell's Hetton 15—Stewart's 15 9—Caradoc 13 9—Heugh Hall 13 6—Seymour Hartlepool 14—South Hartlepool 14—Thornley 14—Whitworth 12—Brown's Deanery 13—Seymour Tees 12 9—Tees 15 6—Cowpen Hartley 13 6—Hartley 12 6—Howard's West Hartley Netherton 13 6—Nixon's Merthyr and Cardiff 20—Sidney's Hartley 13 6.—Ships at market, 140; sold, 85.

WEDNESDAY.—Buddle's West Hartley 13 6—Carr's West Hartley 13 6—Chester Main 12 6—Davison's West Hartley 13 6—East Adair's Main 11—Holywell 14—North Percy Hartley 13—West Wylam 12 3—Wylam 13 3—Wall's-End Brown 12—Bewicke and Co. 13 3—Browne's Gas 11—Lawson 12 9—Northumberland 13—Riddell 13—Walker 13—Russell's Hetton 15—Scarborough 13 9—Stewart's 15 6—Whitwell 13—Denison 13—Heugh Hall 13 6—Hartlepool 15 6—Kelloe 14 6—Seymour Hartlepool 14—Whitworth 12—Adelaide Tees 14 6 and 14 9—Seymour Tees 12 9—Tees 15 6—Cowpen Hartley 13 6—Hartley 12 6—Howard's West Hartley Netherton 13 6—Nixon's Merthyr and Cardiff 20—Sidney's Hartley 13 6—Ships at market, 99; sold, 73.

FRIDAY.—Buddle's West Hartley 13 6—Carr's West Hartley 13 6—Chester Main 12 6—Davison's West Hartley 13 6—Holywell 14—North Percy Hartley 13—Ravensworth West Hartley 12 9—West Wylam 12—Wylam 13—Hartley 12 6—Howard's West Hartley Netherton 13 6—Wall's-End Lawson 12 9—Original Gibson 12 6—Braddyll 15 3—Haswell 15 9—Kepier Grange 15—Richmond 13 9—Lumley 13 6—Scarborough 13 9—Russell's Hetton 15—Stewart's 15 6—Whitwell 13 3—Heugh Hall 13 6—Hartlepool 15 6—Kelloe 14 6—South Kelloe 13 6—Whitworth 12—Adelaide Tees 14 6—Tees 15 6.—Ships at market, 65; sold, 49.

London: Printed by RICHARD MIDDLETON, and published by HENRY ENGLISH (the proprietors), at their offices, No. 26, FLEET-STREET, where all communications are requested to be addressed. [July 6, 1850.